

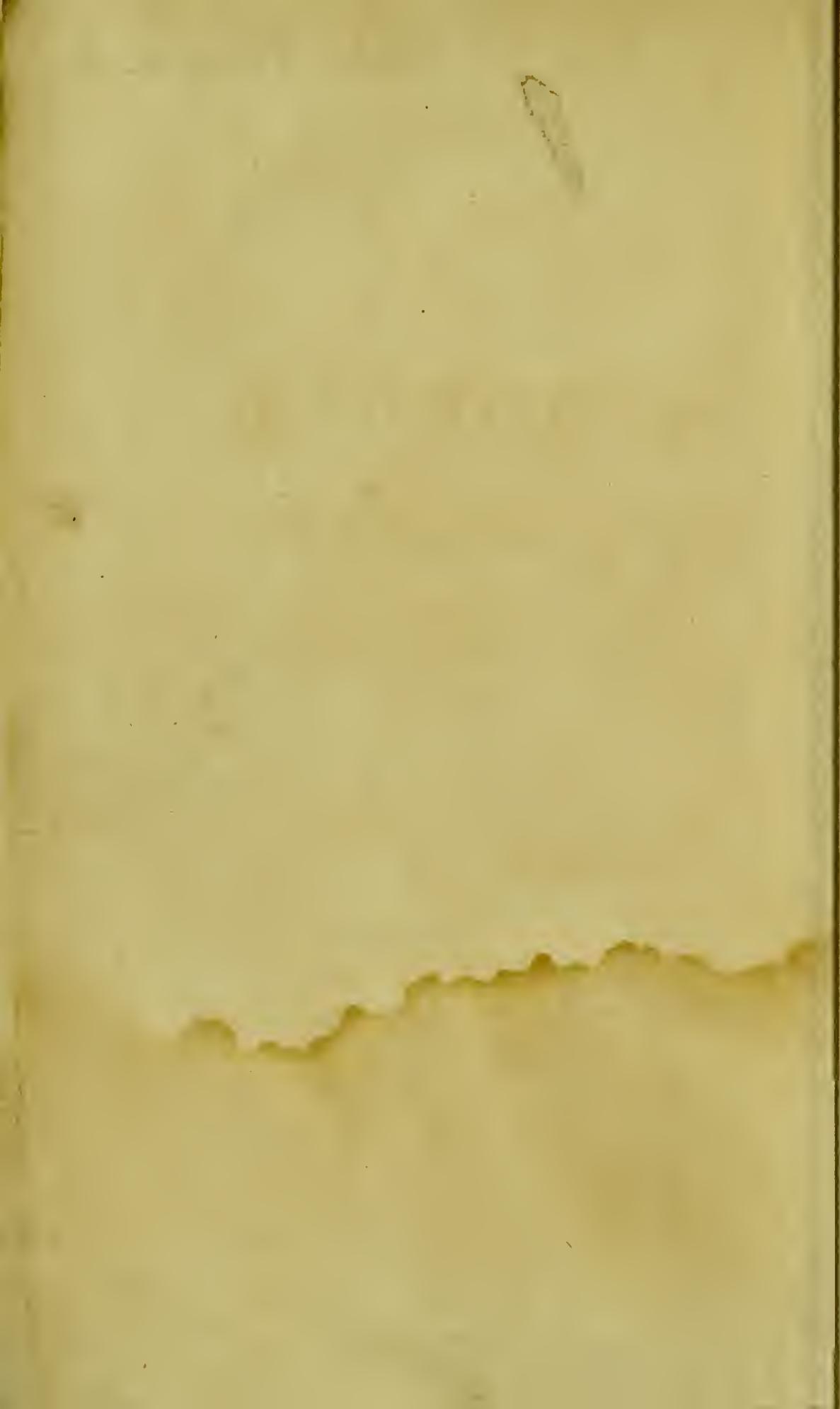
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A

TREATISE  
ON  
**SCROFULA.**

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EDINBURGH:

*Printed by George Ramsay and Company,*  
FOR ARCHIBALD CONSTABLE AND COMPANY, AND W. LAING,  
EDINBURGH; AND JOHN MURRAY,  
FLEET STREET, LONDON.

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1808.

334689



## PREFACE.

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IN the following TREATISE ON SCROFULA, I have endeavoured to collect and arrange the principal facts connected with the history of this interesting disease. I have had frequent occasion to consider the subject, in delivering clinical lectures on the cases of scrofulous patients, who always form a large proportion of the patients in every hospital. The repeated review of the several facts and doctrines, under circumstances which required at-

tention to accuracy, and afforded opportunity for observation, has led to various additions and improvements. But I have not adopted nor preserved any of them without mature deliberation; while whatever was worthy of recording, has been incorporated with the original stock of materials, which has thus been gradually enlarged, and, I hope, been rendered more valuable by the addition of useful information.

The Treatise was originally composed for the instruction of students of surgery, in the form of a spoken discourse, and still in some measure retains the character of this style of composition. The great object was to convey information in a plain and simple manner, and to establish fundamental principles upon satisfactory evidence; and I hope that the fulness of the statements, both with regard to facts and

to arguments, will always be found sufficient for this purpose.

There is not any collection of scrofulous cases annexed, since, in my opinion, an appendix of this kind would only have increased the size of the work, without adding to the value of the information; for scrofula occurs so frequently, that the symptoms of the common forms of the disease are familiarly known to every practitioner, so that particular histories of these common cases would be unnecessary and superfluous. On the other hand, the varieties and modifications of scrofula, in the more uncommon cases, are so numerous and delicate, that it would be impossible to enumerate all the diversities within any reasonable compass; nor is it evident that any great advantage would be derived from the attempt. In place, therefore, of giving particular histories of

scrofulous cases, I have thought it more advisable to aim at making the description of the different appearances so distinct, that every reader of attention will be able to apply the characteristic distinctions to any case which he meets with in practice, and that afterwards he will have no difficulty in treating the case according to the principles of practice laid down.

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A

TREATISE  
ON  
SCROFULA.

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THE prevalence of scrofula is a public calamity, from the insidious tendency of the disease to undermine the health and strength of the unfortunate victims, and to break out unexpectedly from exposure to various occasional causes, which would not affect persons of untainted constitutions. Unfortunately it is a disease of frequent occurrence in this country, appearing under various forms, and in different degrees of severity; from a state of mildness which hardly betrays any perceptible external symptoms, to a state of violence which pro-

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duces the most miserable objects of human wretchedness; and, wherever itmingles with any accidental or local complaint, it makes all the symptoms worse and more difficult to cure.

Every part of the body is liable to suffer from attacks of scrofula. It has, indeed, a tendency to attack some parts in preference to others; but this predilection is common to all diseases attended with local affections, and affords no special objection to the universality of scrofula, which, from every circumstance known with regard to its history, appears evidently to be a disease of the whole constitution.

## CHAP. I.

HEREDITARY NATURE OF SCROFULA.

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SCROFULA is one of those diseases esteemed hereditary, on account of its proneness to descend from parents to children; the tainted constitution of a single parent being sufficient to communicate the disease to the common offspring of a marriage. From this facility of propagation it spreads very extensively over a country; and the tainted families can often pitch upon the original progenitor who first introduced the scrofulous constitution.

There is one remarkable circumstance attending the transmission of scrofula, which explains the nature of the hereditary taint in a clear and satisfactory manner. Although scrofula be truly a hereditary disease, it will occa-

sionally pass over one generation, and appear again in the next; so that the grandfather and grandson (the first and third generations), shall both be scrofulous, while the intermediate generation, which holds the more intimate relation of father and son, and connects the two others together, shall be exempted from any attack of scrofula.

I know a very striking instance of this curious fact, which I mention with the more confidence from having been acquainted with the history of the health of both parents from their earliest years. They are both of them young, strong, healthy, handsome people;—neither of them ever had the smallest appearance of scrofula any where about their own persons. They reside in a healthy country situation, lead a life of temperance, take regular exercise in the open air, and possess an ample fortune, which affords them the command of all the comforts and conveniences of life; circumstances which promise a healthy and vigorous offspring. Yet, contrary to every reasonable expectation, I have known few children who have become victims to scrofula at a more early pe-

riod of life, or in whom the attack has been more severe. The probable origin of this great calamity was the prevalence of scrofula in one of the grandmothers; and, to me at least, this imputed source of disease affords a satisfactory explanation of the family misfortune.

The circumstance of a hereditary disease passing over one generation in the line of descent, without having its power of transmission extinguished, is not exclusively confined to scrofula, as we find other hereditary diseases exhibit a like interruption of continuity in a still more eminent degree. In fact, it is not the actual disease, but the susceptibility of being affected with it, that is born with the individual; so that the children of the most diseased parents do not come into the world with existing attacks of their inherited diseases. The children of gouty parents are not born with symptoms of gout, nor the children of insane parents with symptoms of madness; for however much these diseases may be inherent in the constitution, they do not make their appearance in the early stages of life.

Some diseases, too, such as small-pox and hooping-cough, which only occur in consequence of exposure to certain exciting causes, are very fatal in particular families; the family fatality demonstrating a peculiarity of hereditary constitution. But as these diseases have only a casual existence, depending upon extrinsic circumstances, they may lie dormant for years, and thus allow a generation to experience a complete exemption from them.

It is not, indeed, usual to call small-pox and hooping-cough hereditary diseases, because their appearance is accidental, and their duration transient. This, however, is only a variation of degree, not any real difference in the nature of the affection; for it has already been shewn, that the constitutional predisposition exists in the cases of small-pox and hooping-cough, as well as in the case of those diseases universally esteemed hereditary, although the influence of the predisposition is neither so visible nor so uninterrupted. And whoever turns his attention seriously to the investigation of the subject, will be satisfied that, in employing the expressions *hereditary disease* or

*hereditary taint*, he merely denotes a superior aptitude to receive certain morbid impressions.

Agreeably to this doctrine, it may often be in the power of a practitioner to avert certain hereditary diseases, by a judicious prophylactic treatment of the individual; and therefore, it is the indispensable duty of all persons who have the charge of rearing children suspected to be of scrofulous parentage, to employ every precaution which is likely to prevent the invasion of so formidable a disease.

## CHAP. II.

SYMPTOMS AND APPEARANCE OF SCROFULA.

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THE scrofulous constitution is marked by symptoms which characterize it in a very evident manner. The complexion is, in general, fair, and the colour of the hair either reddish, or of some other light tint; people with dark complexions and black hair being much less subject to scrofulous complaints. The skin is remarkably soft and white, and the face often has a polish, and shines. The cheeks are, in general, florid; and the tunica albuginea is often of a dead white; and more pale than usual. The edges of the eyelids are frequently affected with a degree of tenderness which easily degenerates into a troublesome inflammation, that distresses the patient by its continuance,

and produces a disagreeable degree of deformity. There is frequently, too, a swelling of the upper lip, with some thickening of the nostrils and point of the nose. Independently of these particulars, scrofulous people are often comely and handsome, and rather distinguished for acuteness of understanding and precocity of genius.

The distinctness and prominence of those different symptoms depends upon the extent of the predisposition to scrofula; as they are more or less evident, according to the degree of contamination in the constitution of the individual. It may, however, be observed, that without any previous indication of a tainted constitution, distressing symptoms of scrofula frequently break out after severe attacks of small-pox, measles, scarlatina, and other enfeebling diseases.

Scrofulous people, though active and alert for the time, are seldom robust, or able to endure great fatigue, without having their flesh much wasted, and their strength much exhausted; but once they begin to recover from this sudden falling off of flesh and

strength, they have a rapid convalescence, and quickly regain their former plumpness and vigour.

So sudden a transition from one extreme to another, marks a great laxity of solids. Possibly it may depend upon a deficiency of red blood in the system: For the general whiteness of the skin, and paleness of the muscles, favours the suspicion, that a smaller than usual proportion of red blood circulates in the vessels of scrofulous patients; especially if scrofula has made considerable progress in affecting the constitution with disease.

One of the most frequent symptoms of scrofula is swelling in the superficial lymphatic glands, especially in those of the neck. These glands swell without any previous complaint, and often attain a large size before the swelling attracts notice. The swellings are frequently unaccompanied with pain or discolouration; which favours the conclusion that the inflammation, if it exist at all, is slow and inactive, and that, upon the whole, the complaint is of an indolent nature.

The frequency, and often universality of such swellings in the lymphatic glands, has induced many practitioners to suppose scrofula to depend entirely upon a morbid affection of the lymphatic system; though I question much whether this inference be supported by an accurate and extensive induction of facts; for many other parts of the body, which show little of a glandular structure, are often the primitive seat of scrofula. It very frequently attacks the joints of the extremities, the bones, and the mucous membranes, without any previous or concomitant affection of the lymphatic system. Besides this, the lymphatic system is not only liable to idiopathic attacks of scrofula, in common with the rest of the body, but is likewise exposed to suffer symptomatically, in consequence of the disposition of the glands to swell and inflame, from any cause of irritation propagated along the course of the lymphatic vessels; and from this source of error the commencement of scrofula in the lymphatic system may be supposed more frequent than what the natural proportion of idiopathic cases warrant.

Scrofulous swellings of the glands are often stationary, or at least very slow in their progress of increase or diminution. I have, however, known exceptions to this general rule, in several cases, in which the affected glands have enlarged suddenly, and subsided again, in the course of twenty-four hours, without any obvious cause for so rapid a change.

The same indolence and absence of inflammatory symptoms which characterize scrofulous swellings of the lymphatic glands, likewise distinguish similar affections in other parts of the body. The commencement of the attack is in general unperceived, and the progress slow; though the tumefaction which follows is frequently very considerable.

The greater number of scrofulous affections are accompanied with a preternatural swelling of the parts attacked. These swellings are principally of two kinds, which, though very dissimilar in their appearance, are equally characteristic of scrofula. One is remarkable for its softness; the other is more of a firm gelatinous consistence; and neither of them are, in

common cases, attended with any perceptible inflammation.

I have seen these soft swellings, though I confess but seldom, rise suddenly, sometimes in the course of a single night. This fact, indeed, is not generally admitted; and as I have enjoyed opportunities to observe it in cases where there was no possibility of mistake, I shall relate the history of one of the most remarkable. One morning, in dressing a child about two years old, the nursery-maid was alarmed with the appearance of a soft swelling on the region of the right scapula. There had been no such swelling perceived the preceding evening, when the child was undressed; it was therefore supposed to have arisen during the night, while the child lay asleep. It might possibly, however, have been of slow growth, and have been present for some time, although it passed unnoticed, from the absence of pain. But next morning all uncertainty vanished, by the appearance of another similar tumour upon the region of the left scapula, situated somewhat lower down than the corresponding tumour on the right.

The appearance of this second swelling dissipated every doubt; for as the child's body had been narrowly inspected the preceding evening, while naked, and as no rudiment of swelling could then be discovered, the swelling which appeared in the morning must have arisen in the course of a single night; and therefore establishes the truth of a very important fact in the history of scrofulous swelling. I, however, by no means wish to represent this as the usual rate of their growth; for scrofulous swellings are in general remarkably slow in their progress, so that any instances to the contrary are to be regarded as exceptions to the common rule. The above mentioned case affords the most remarkable instance of a deviation from the ordinary rate of growth in scrofulous swellings with which I am acquainted. I have indeed met with other cases of a similar nature, but not to the same extent.

Soft scrofulous tumours are always formed by the effusion of a fluid; and it may be remarked, that they are somewhat variable in their size, being one day more prominent and tense, the next more sunk and flaccid.

This variation, however, is not constant, and is seldom considerable, and must always depend upon the occasional absorption and deposition of part of the fluid which the tumour contains. In a few cases, indeed, the fluid is completely absorbed, so that nothing remains but an empty cyst, which, when it is deep seated, and of considerable thickness, may mislead the judgment of the inexperienced.

The cysts which contain the fluid are not original and necessary parts of such tumours, and only occur in cases of some standing. It is indeed impossible that any thing like an organic formation could be completed in the course of a single night. But a quantity of any fluid effused into the loose cellular substance, gradually compresses the more external laminæ, and thus forms the rudiments of a cyst by mere mechanical compression. After compression has begun the formation of a cyst, the effusion of a lymphatic fluid completes the process, by uniting the different layers together into an uniform, coherent, organised mass. The completion of this process, however, necessarily requires time, and it like-

wise requires the presence of certain conditions which do not always obtain in scrofulous cases; for the kind of effusion which promotes adhesion is a consequence of inflammation; so that a certain degree of inflammation must take place as a necessary step of the process. Inflammation, however, at least to an obvious degree, is not an inseparable concomitant of such effusions; therefore we sometimes find them not only unprovided with a regular cyst, but even not very accurately circumscribed within determinate limits.

The nature of a fluid which is effused so suddenly cannot differ much from what circulates in the vessels from which it issues. Accordingly, when these tumours are opened soon after their appearance, they are found to contain nothing but a serous fluid, which, immediately after its effusion, is separated among the cells of the reticular membrane. The tumour, therefore, as the fluid is not contained in one common cavity, feels soft and pappy, communicating little impression, either of fluctuation or elasticity; but when the fluid has been effused for some time, these circumstances un-

dergo a sensible alteration, after which we can distinctly perceive the sensation of a fluid contained within a particular cavity. This change seems to proceed from the destruction of the partitions which separate the cells of the reticular membrane from one another, thereby allowing the whole effused fluid to unite and form one collection. But, as these collections are not accompanied with any sensible degree of inflammation, they are not surrounded with a firm, solid, circumscribing base; and they do not betray any great tendency to ulcerate the skin, and open of their own accord. Upon this account, they sometimes become very prominent, from the gradual distension of the skin; till at last they acquire the very singular appearance of a pendulous tumour. This singularity is so great, that, so far as I know, it is the only species of tumour containing a fluid which assumes this form.

The quality of the matter which such tumours contain, likewise undergoes a change from the circumstances in which it is placed. From stagnation, and other causes, it is in part decomposed, when the more solid parts are de-

posited in the form of little masses, resembling coagulated milk. The remaining portion of the fluid is thus rendered thinner, and then resembles whey. To this is added a quantity of purulent matter, formed on the internal surface of the cavity, which seems to be attacked with a slow, but sufficient degree of inflammation to generate purulent matter. The admixture of this purulent matter gives a different appearance to the contents of the tumour, which now more resembles those of a common abscess. The resemblance is the greater the longer time the complaint has subsisted. The contents, however, never acquire precisely the same properties with healthy purulent matter, being always thinner, more transparent, and more of a greenish tint.

However feeble the tendency to ulceration may be, the skin, at least, ulcerates through the whole thickness of its substance, and allows the matter to escape at a narrow opening. After the evacuation of the matter, the tumour subsides; but the parts having, in general, little disposition to heal, form, in general,

a running scrofulous sore, which continues open for an indefinite length of time.

Such is the ordinary course and termination of soft scrofulous tumours. They are commonly termed *Lupi*, and occur very often in persons of a scrofulous constitution.

The other kind of scrofulous swelling, which I represented to be of a gelatinous consistence, always increases slowly, and most commonly attacks the neighbourhood of joints, where the tendons of muscles run. The affected part enlarges, and becomes gummy, though it does not acquire any circumscribed determinate form; but the size of the swelling, and, in general, the softness, gradually increases, till, in the progress of its advancement, particular portions near the surface become more prominent, inflame, suppurate, burst, and discharge matter. But, as the suppuration is only partial, and the discharge inconsiderable, they have little effect to diminish the size of the swelling, or to produce any other change of importance. The state of the disease, therefore, remains unchanged, except in the addition of the little superficial ulcerations, which form sinuses or sores, that conti-

nue to discharge matter. When swellings of this kind occur in the extremities, they frequently attain a very considerable size; and are sometimes of so indolent a nature, as to produce chronic enlargements, which continue during the remainder of life, and render the affected limb unshapely and cumbersome.

Small tumours, of a like nature, also appear under the skin, dispersed over the surface of the body, where they form tubercles about the size of hazle nuts. They rarely become larger, till they burst, and discharge matter; after which they seem to undergo changes similar, in all respects, to those already described. When these tubercles are very numerous, the skin becomes perforated with a number of holes, like a sieve; and if the ulcers which form in them ever heal, then the stools of the tubercles remain under the character of little hard knots or lumps, which are, to a certain degree, troublesome and ugly; but, from their appearance, history, and situation, they never can be mistaken for affections of the lymphatic glands.

The two species of swellings above-mentioned, are the most frequent and most important; but not the only ones which occur in cases of scrofula. Both of them, too, are modified by the extent to which scrofula enters into the character of the morbid action: for an affection, regarded as scrofulous, may partake more or less of healthy inflammation, and will be more or less difficult to cure, according as it declines into the one or the other extreme. The shades of difference in the composition of the attack, are, indeed, too numerous and delicate to be all accurately noted in a description; a common abscess, however, in a person of a scrofulous constitution, often exhibits appearances which betray the presence of a scrofulous taint. The primitive deposition, which constitutes the basis of the abscess, is, in general, more rapidly formed; the swelling is somewhat more transparent; the surface more shining; and the tint of colour more blue. These kind of abscesses, too, contain, in proportion to their size, a larger quantity of purulent matter before they break, than common healthy phlegmonic abscesses. The extent of these variations is proportioned

to the degree in which the tendency to scrofula prevails.

A similar observation may be applied to a diversity in the appearance of the matter contained in such abscesses ; but, besides any difference in the character of the matter, a singularity of a much more interesting nature occasionally occurs, in opening abscesses of this class : The evacuation of the matter, in place of disclosing an empty cavity, discloses a mass of cellular membrane, apparently deprived of life. It resembles wet cotton, and often separates in the form of a solid mass. The separation is effected without pain, and is productive of no inconvenience whatever. This state of the cellular membrane bears some remote analogy to the death of the central parts in a carbuncle ; from which, however, it differs in the absence of malignity, pain, and danger.

The solid contents of such abscesses, consist of the common constituent parts of the body, in its progress towards decay and separation ; but in another more rare variety of scrofulous swelling, the interior part is filled with a preternatural substance, produced by the action of

disease. These tumours, to all external appearance, resemble certain small scrofulous tumours situated near the articulations; but, upon being opened, in place of discharging matter, they present a fungous mass, and the tumour undergoes no diminution of size from the incision. This case is neither so simple nor so mild as common soft scrofulous swellings. They may be thought to bear a distant resemblance to the disease termed, by some authors, *Fungus Hæmatodes*; but none of the instances which have come within my notice, have displayed any of the malignity inseparable from this very dangerous disease.

The swelling of the lips, which I have already mentioned as a mark of a scrofulous constitution, sometimes arises to a troublesome symptom of disease. It is then, for the most part, accompanied with an eruption of scrofulous pustules upon the face. These pustules have little inflamed bases, which terminate in a scabby crust, that occasionally covers a great extent of surface. This pustular eruption is attended with a swelling of the subjacent cellular membrane, which alters the shape of the

features, and deforms the countenance to a very considerable degree. It seldom, however, proves chronic, and is never accompanied with danger.

The bones of scrofulous people also partake of the general disease in the constitution; they seem to contain a smaller proportion of animal earth, and a larger of gelatinous matter, than what consists with the composition of a healthy bone: on this account they are exceedingly susceptible of morbid action. The diseases to which they are most liable are general and partial enlargement, inflammation, suppuration, exfoliation, and partial death. They are also easily fractured; and this facility of fracture is much increased, especially in the long bones, by the deficiency of solid substance; for the cylindrical shell is preternaturally thin, and, therefore, mechanically weak, so that the bone breaks upon the application of an inconsiderable force.

In describing the different symptoms of scrofula, I traced their progress no farther than to their suppuration, and the formation of an open sore; but as the appearances of these

sores, and of the matter which they discharge, is peculiar and characteristic, I shall now endeavour to describe them.

The margin of the sore is commonly of a pale red or purplish cast, with a shining surface; the edges in general thin, and the surface of the sore sunk somewhat below the level of the surrounding parts. These sores have in general but a small degree of inflammation; little pain; are not very sensible to the touch; and have no great disposition to spread. The matter which the sores discharge is viscid, with very little colour, but often with an offensive smell; from the viscosity, it adheres to the surface of the sore, and covers the granulations. Such are the ordinary appearances which scrofulous ulcers present to the observation of practitioners. It would, however, be too much to expect perfect uniformity in a class of complaints naturally variable; for scrofulous ulcers are liable to considerable variations from many adventitious circumstances. They sometimes assume a more malignant aspect, having elevated indurated edges, and fungous central granulations, accompanied with pain and an ichio-

rous discharge. In these cases they may counterfeit the appearance of cancerous ulcers: but though the resemblance may be very imposing, we are in general able to ascertain the real nature of the case, by tracing its history from the commencement, and by inspecting the rest of the patient's body with accuracy; when the vestiges of former scrofulous sores, or other proofs of a scrofulous constitution, often manifest themselves, and banish every doubt. This kind of collateral evidence is often requisite to render the investigation satisfactory and conclusive, and ought to be employed in all cases of difficulty.

Scrofulous sores often continue to discharge for a long while with very little change of appearance. In time, however, they begin to heal, and, for the most part, dry up altogether at last, leaving a very ugly red irregular cicatrix, over which the skin seldom recovers its natural aspect.

Scrofulous complaints, when no particular circumstance determines the time of their commencement, in general become troublesome in spring, and get better towards the end of

summer. In this way a patient will go on for years, having swelled glands and running sores at certain seasons, and getting quit of them at others, till at last the ulcers and swelled glands either heal up and subside permanently, or produce a distressing train of symptoms, which ultimately put an end to the patient's life.

These vicissitudes in the appearance of scrofulous complaints occur most remarkably during infancy, or about the age of puberty; for the most severe attacks of scrofula commence during the earlier periods of life. The primary attack, too, often admits of an apparent cure, while their sequelæ are secretly laying the foundation of diseases which undermine the patient's constitution, and unexpectedly manifest their insidious effects at a distant period of time, when no suspicion was entertained of their existence.

## CHAP. III.

PROGNOSIS.

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THE degree of danger which attends scrofula, depends so much upon the particular part of the body which is the seat of the complaint, and upon the severity of the individual attack, that I cannot venture to lay down any precise prognosis in a general view of the disease. The course, however, of scrofulous complaints, varies somewhat according to the difference of their local situation. Those which are situated nearer to the centre of circulation are more rapid in their progress, and heal more easily than those which are more remote; the most distant being always the most tedious and the most difficult to manage; and, both from

this circumstance, and from the disadvantageous position in the ordinary attitudes of the body, scrofulous affections of the lower extremities are the worst, and the most intractable. A similar observation, indeed, is applicable to all other local complaints; but it applies particularly to scrofula, on account of the indolent nature of the disease, and its consequent aptitude to suffer an aggravation from any circumstance which produces languid action in the parts affected. So far, however, is universally true, that chronic scrofulous sores, accompanied with fever, are always to a certain degree dangerous; as the fever, for the most part, degenerates into a hectic fever, which preys silently upon the patient's constitution.

The quickness of pulse, and hectic feverish state, is sometimes the effect of mere weakness; in which case, it is relieved by rest and nourishing diet, and goes off gradually, as the patient acquires strength. But when the hectic feverishness proceeds from any permanent disease in the system, it commonly proves fatal. The patient, however, never dies from the effect of hectic fever, till he is affected with

periodic exacerbations, which terminate in profuse colloquative sweats; and the scrofulous symptoms must be severe, of great extent, and long continuance, before they produce so dangerous effects. The immediate cause of death, in these cases, is probably much connected with the absorption of scrofulous matter, which circulates in the system, along with the other fluids, and, acting like an extraneous body, proves a constant source of irritation. When this is the cause of the hectic fever, it is only to be subdued by preventing the absorption of the matter, as no medicine which can be administered has power to counteract the pernicious effect of its presence. The sore, therefore, must be destroyed or removed, otherwise the patient sinks gradually, in consequence of the increasing distress which this constant disturbance to the constitution produces.

The pernicious effects produced by the absorption of scrofulous matter will doubtless be much increased by the constant irritation which the presence of a painful sore excites. How far, indeed, irritation alone, independently of any absorption of matter into the system, is suf-

ficient to induce a state of wasting hectic, is a point not easily determined. It certainly aggravates the severity of the attack, and may, therefore, suggest more active practice ; though it does not lead to any different conclusion with regard to the principles upon which the case ought to be treated.

Popular opinion has long ascribed the production of hectic fever, in cases of extensive scrofulous sores, attended with a copious discharge, to the absorption of the scrofulous matter. The explanation was probably suggested from observing patients, afflicted with such sores, suffering from the effects of fever ; from observing that the fever increased when the discharge suddenly diminished in quantity ; and that the diminution or cessation of the discharge was often accompanied with frequent evacuations of irritating matter by stool : But these arguments, however plausible, could not be regarded as conclusive, without the support of some more decisive facts, which did not admit of a different explanation ; since, however consistent this explanation might be with the general complexion of the phenomena, it was

still possible to conceive, that the purulent matter might be generated in the system, and deposited on the surface of the intestines, without having any connexion with the original external sore. The fallacy of this supposition, however, is fully exposed, by the result of an experiment, which, so far as I know, was invented, and first carried into execution, by Dr Kirkland, who conceived the idea of removing the scrofulous matter from the surface of the sore, as fast as it was formed, by the application of a porous bibulous substance. For this purpose, he applied a piece of soft dry sponge, which was frequently renewed. The expedient answered his expectations; for the scrofulous matter, being now instantly removed from the sphere of action of the absorbent vessels, had no longer an opportunity to enter the system, and to produce fever and diarrhœa. These symptoms, therefore, began to abate, as soon as this practice had time to operate, and were both completely removed by the time it could be supposed to produce its full effect.

I have repeated the practice myself, in order to verify Dr Kirkland's report of its efficacy;

and have had the satisfaction to find the result agree with the Doctor's statement. There are, however, but few cases which afford a favourable opportunity to give the practice a fair trial; for, unless the sore be so situated, and so formed, as to admit the universal and accurate application of the sponge, the absorption of the matter will not be complete, and the effect, consequently, will be but partial. Unless the absorption of the matter be the sole or principal cause of the distress, the prevention of the absorption will only alleviate the symptoms, without curing the complaint: In short, unless the circumstances of the case be such as to admit of recovery, either permanent or temporary, the experiment will not be decisive. But as these conditions rarely obtain, this ingenious mode of dressing, although highly instructive, as an experiment, to establish a most important point in the doctrines of pathology, has no chance ever to be introduced into general practice, as an improvement of great and extensive utility.

## CHAP. IV.

PROXIMATE CAUSE AND NATURE OF SCROFULA.

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So little satisfactory is known, with regard to the proximate cause of scrofula, that I choose to decline entering upon a formal discussion of the question. Wiseman, indeed, supposes the proximate cause of scrofula to consist in the presence of a peculiar acid, which pervades the whole system. He does not, however, adduce any regular argument in favour of the theory; far less does he pretend to ascertain the fact, by a chemical analysis of the circulating fluids. This theory, therefore, is a mere hypothesis, unsupported by proof, and unworthy of particular notice.

The nature and tendency of scrofula is so far more certainly known, that in all respects it produces sedative effects, which weaken and impair the powers of life. It is the effect of some attacks to kill the parts which they invade. This seems to be the case in those affections of the cellular membrane, which were described in a former chapter. Portions of the bones, too, are apt to lose their life, and to be cast off by the action of the adjacent living parts. It would farther appear, that certain affections of the lymphatic glands partake much of the character of death ; at least, they remain swelled and indurated, without any tendency to suppurate or to subside, and seem to have lost all power of organic action. They have not, indeed, acquired so much the character of extraneous bodies, as to prove a sufficient source of irritation, to stimulate the adjacent parts to act in order to remove them. But this circumstance alone is not inconsistent with the kind of lifeless state described ; for, in certain species of gangrene, large portions of the body are deprived of all circulation, become shrivelled, hard, black, and insensible, and are in every re-

spect dead, excepting that they do not putrefy and separate from the contiguous living parts.

The matter which scrofulous sores generate does not seem to possess much acrimony, or great power of contamination ; for, if the sore be of limited extent, the system does not suffer by its continuance, nor do the neighbouring parts seem to be affected by its vicinity. This inactivity of scrofulous matter was brought to the test of experiment by Mr Kortum\*, who attempted to transfer scrofula from one person to another by inoculation ; but, although he was at great pains to insert the matter completely, and although he repeated the experiment frequently, yet all his attempts failed of success, as no disease was communicated to the person inoculated, nor even any very evident irritation excited at the place where the matter was inserted : So that all apprehension of scrofula being propagated by contact or contagion is a mere groundless prejudice.

One of the sedative powers of scrofula has been thought to arise from the weak action of

\* *De Vitio Scrofuloso*, p. 218.

the heart, which produces a languid, unsteady, irregular circulation, and favours congestions in particular viscera. If the contractions of the heart are too feeble to propel the blood forward, the circulation will cease altogether, and the patient die suddenly. Accordingly, such sudden deaths sometimes happen, though, indeed, not often ; and in these cases the heart has, upon dissection, been occasionally found enlarged, pale, and flaccid. But though this state of appearances after death corresponds exceedingly well with the symptoms during life, it is not easy to apply the knowledge to any practical use ; for such cases are not only of rare occurrence, and the pathology of them imperfectly made out, but, supposing we were previously acquainted with all the circumstances, we possess no remedy for the disorder.

## C H A P. V.

OCCASIONAL CAUSES.

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OCCASIONAL causes have so powerful effect to bring forward an attack of scrofula, that several respectable practitioners are persuaded of their sufficiency to produce it, independently of any hereditary predisposition, provided they continue to operate for a sufficient length of time. The long continued operation of powerful external causes is undoubtedly capable of producing very important changes in the human constitution. How far the combination, energy, and continuance of them is capable of giving birth to scrofula, is a difficult point to determine. But even the possibility

of suggesting the question, as plausible, is alone a proof of the great influence which they possess, and of the great attention which they require, to guard against their operation. There can be no doubt with regard to the existence of predisposition; and when this is conjoined with the action of occasional causes, their united effect is irresistible.

Of all occasional causes, Climate is the most powerful. The extremes of heat and cold are equally free from scrofula. It prevails most in those climates where the atmosphere is perpetually loaded with cold vapours; where the seasons are variable, and no weather steady. From latitude  $45^{\circ}$  or  $50^{\circ}$  to latitude  $60^{\circ}$  is the principal climate of scrofula. The climate of Scotland, which is within this range, is remarkable for the frequent occurrence of scrofulous complaints. When the temperature of the air is just above the freezing point, the cold is the most difficult to bear, on account of the great quantity of watery vapours which float in the atmosphere: a greater degree of cold condenses the aqueous vapours, and renders the air clear: a greater degree of heat

disperses them. Accordingly, it is an universal observation, both in the torrid and the frigid zone, that perfectly dry air, whether produced by great heat, or great cold, always brings the most healthy weather. Mr Dobson, in his account of the *harmattan* wind, which blows on the coast of Africa, and is so warm and dry as to accomplish the crystallization of pure alkali, observes, that all endemial diseases get well during the blowing of this wind: Mr Graham, likewise, who was long governor of the Hudson's Bay factory, situated on the east coast of America, about the 60° of north latitude, makes nearly a similar observation with respect to intense cold; as he invariably found, that the raw, cold, damp weather, when the mercury in Fahrenheit's thermometer stands between 30 and 40 degrees, was the most intolerable to bear, and the most unfriendly to health. Now this is very nearly the winter weather of Scotland. Upon the whole, therefore, we may lay it down as a general maxim, that the greatest degree of cold which can be conjoined with moisture, is the

state of weather which tends most to favour the appearance of scrofula.

The long continuance of inclement weather increases the predisposition to scrofula; and in persons already sufficiently predisposed to it, any uncommon, though temporary exposure, to cold and wet, is often an exciting cause of an immediate attack. I have known this happen on many occasions. Wise man relates a marked instance of a person who, merely by sleeping one night in a damp cellar, was attacked with strumous swellings, which occasioned his death in less than a twelvemonth.

Besides climate, every other circumstance which weakens the constitution predisposes to scrofula: thus, breathing impure tainted air, which is not properly fitted for the purpose of respiration, and living upon a scanty allowance of unwholesome indigestible food, which does not afford proper nourishment to the body, favours an attack of scrofula, by reducing the strength of the system, and making the person weakly. There are likewise other particulars which, though not so much the object of general attention, yet contribute to the pro-

duction of scrofula by their tendency to weaken the constitution: such, for instance, are filth and dirtiness of person; indolence, leading to the neglect of salutary exercise; and confinement in cold damp habitations, with the want of warm clothing, to protect the person against their injurious effects.

But one of the most frequent occasional causes of scrofula is external violence. Many accidents which would not be followed by any serious consequence to a person in health, produce severe scrofulous affections in a person of a tainted constitution. Even the simplest of all debilitating causes, fatigue from too much exercise, though not otherwise pernicious, yet proves the occasional cause of scrofula, from the effusions which accompany it, and the weakness which it induces.

Lest the fatal effects of over-fatigue from exercise may seem to be represented in too strong a point of view, I shall state the particulars of a case which fell under my own observation. A young lad, about seventeen years of age, was obliged to march many days with a recruiting party, in bad weather, without halt-

ing. He was much tired with the march. At the end of it he began to complain of a swelling in the region of the left buttock, which soon attained a large size, and proved to be of a crofulous nature. When opened, it discharged a quantity of a serous fluid, mixed with some purulent matter. The patient became hectic, and died in the course of a few weeks.

In reviewing all the preceding observations with regard to the history of scrofula; it seems obvious, that, whatever may be the effect of the different remote and occasional causes, when acting separately, and for a short time, their power, when conjoined and long continued, is almost irresistible; so that the assistance of predisposition, from hereditary taint, is hardly requisite to render their operation effectual; and that, whatever share hereditary predisposition may have in communicating a susceptibility to scrofula, it is, on all suppositions, equally necessary to avoid exposure to every active cause which tends to favour the appearance of a disease so distressing, and so much under the influence of situation and external circumstances.

This finishes all the observations which I had to offer upon the remote and occasional causes of scrofula. They are intimately connected with the method of cure which I propose to recommend ; for as scrofula is very much a disease of predisposition, excited by exposure to occasional causes, the principal indications of cure are to correct the scrofulous tendency in the constitution, and to prevent the operation of the occasional causes. If we could promise success in the fulfilment of both indications, we might hope to cure most cases of scrofula ; and although the attainment of this end is not altogether within our power, yet many of the requisite precautions are so obvious, and so much under command, that a patient may be certain of deriving much benefit from following a proper system of regulation.

## C H A P. VI.

METHOD OF CURE.

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THE treatment of scrofula naturally divides itself into two periods.

The first is that in which, without any local sore, or other marked symptoms of complaint, there is evidence of a scrofulous predisposition prevailing in the system.

The other is that in which some local sore, or other scrofulous symptom, which requires appropriate management, that may either concur with the general treatment of the constitution, or interfere with it, has actually taken place.

As scrofula is induced, or at least very much promoted by the slow operation of a number

of circumstances which produce a gradual change in the constitution, there is much reason to expect benefit from placing the patient in a totally different situation of circumstances. If, for instance, the continuance of improper diet tends to favour the appearance of scrofula, the amelioration of diet will naturally counteract this tendency. A similar advantage will be derived from substituting the respiration of pure salubrious air in place of what is tainted and unwholesome; and, in like manner, every arrangement conducive to health will contribute to correct the disposition to scrofula; for a system of management founded on these principles, acts in direct opposition to the remote and occasional causes of scrofula, and will therefore avert or cure the attack, provided the taint be not too deeply implanted in the constitution, nor the disease too far advanced in its progress.

Possibly, however, there is no advantage which is not accompanied with some collateral inconvenience; so, in this case, the more encouragement we have to expect the correction of a scrofulous tendency by a judicious

regulation of the ordinary habits of life, the less reason have we to hope for the discovery of a powerful specific remedy; because the accumulated effects of a long series of errors in diet and regimen, terminates in disease only by the gradual depression and derangement of the different functions of life, without making any immediate morbid impression on the system. One may perhaps venture to assert, that all diseases which originate from hereditary predisposition, or which are induced merely by a continued deviation from a proper regimen of health, are not likely to be cured by specific remedies; while those diseases, which arise from the immediate application of morbid matter, are the most likely to be cured by the use of specifics. It would, however, be unreasonable to lay down this position so generally and so absolutely as to discourage any attempt to cure an intractable disease, by every means which the circumstances of the case, or our knowledge of remedies, might suggest as meriting a trial; at the same time, nothing could justify the desertion of a practice which is so far known to be useful, in pursuit

of what is unsupported by experience, and may prove entirely chimerical.

Of the various articles of regimen which demand attention in the management of scrofulous patients, the article of diet is one of the most important. The languor and debility which prevails in scrofula naturally indicates the use of simple nutritious digestible food, taken in such quantity as the stomach can bear, without being overloaded. Nutritious diet is supposed to include a reasonable allowance of animal food. A violent prejudice, it is true, formerly prevailed in favour of a contrary system of management. But experience, and more accurate observation, has now fully confirmed the pernicious effects of that over abstemious system, and has deservedly brought it into discredit. I have no doubt on the subject myself; and so far as it is allowable to argue from a single instance, I may refer to a case, in which the question was brought to the test of experiment. The elder children in a gentleman's family were reared agreeably to the precepts of the abstemious system, and became scrofulous at an early period of life.

This distressing occurrence occasioned great vexation and alarm; and the parents, being people of good sense, determined to alter the system of management, and to try the effects of a fuller and more nourishing diet. The younger children, therefore, were all reared according to the opposite system, and, being indulged in a more liberal allowance of food, had the good fortune to escape any appearance of scrofula. It is impossible to conceive a case, in which the circumstances of the patients on whom the experiment was made could be more exactly alike.

But though these are the general principles which ought to regulate the diet of scrofulous patients, yet the conduct of the practitioner must always be accommodated to the particular exigencies of the case; and there are two opposite conditions of the disease, which require a deviation from the general rule. In one case, the powers of the system are reduced so low, and the action of the stomach so much enfeebled, that nourishing food, in place of being digested, proves a source of irritation and oppression. Necessity, therefore, compels

the adoption of a very light and sparing diet ; it is, however, the most nourishing which the patient can bear : So that the deviation from the general rule is more apparent than real, and proceeds from the weakness of the patient, rather than from any unsteadiness on the part of the practitioner.

The other case occurs when a scrofulous predisposition is ingrafted on a vigorous constitution, interwoven with a plethoric diathesis ; for, although a deficiency of blood may be a frequent characteristic of scrofula, yet, when the natural tendency to plethora predominates, every precaution must be employed to prevent it from attaining excess ; both because scrofula, so far as it operates, opposes less resistance to any faulty tendency which may exist in the constitution, and because it favours congestions in particular organs, to which, at any rate, plethoric subjects are very much exposed. It may be observed, however, that this plethoric habit, which proves so incommoding, when connected with scrofula, rarely occurs at a very early period of life.

I do not know any appropriated technical term to express that state of the system, which, in the common language of the country, is termed a gross habit of body. It seems to consist in a certain species of fulness, different from plethora. The complexion, in place of being florid, is of a pale yellowish colour, and the eyes dull; the plumpness of the body is accompanied with flabbiness and clumsiness, and wants the firmness and elegance of health; the glands are subject to infarction, and the skin to be affected with superficial sores and pimples. This particular constitution seems to be connected with a scrofulous predisposition, and too full a mode of living, which requires reduction, by evacuation.

Permanent strength, doubtless, is only to be imparted to the body by a plentiful supply of wholesome nourishment; and provided the stomach performs the function of digestion with vigour, it is better to abstain from the use of any unnecessary stimulus. But should an occasional languor or atony of the stomach take place, then a moderate allowance of wine affords a safe cordial, which often proves ex-

tremely salutary, without heating the system. The necessity of the indulgence, however, the quantity and the frequency of exhibition, ought always to be regulated according to the discretion of a practitioner, who will attend carefully to the special circumstances of the case; and when wine is prescribed, in a medicinal view, it is preferable to give it between meals, with a bit of bread, as at that time it proves more serviceable as a cordial, and is less apt to excite feverish heat, or to create acidity and indigestion.

The exercise of persons who are studious to ward off an attack of scrofula ought to be regular, moderate, and long continued, sufficient to dispose them to rest, but short of inducing that degree of fatigue which would excite a temporary fever, or permanently impair the strength. It seems immaterial what kind of bodily exercise is preferred, provided the above-mentioned circumstances be properly attended to by the patient.

When the patient is too young, or too weakly, to take sufficient exercise, by the exertions of his own body, it has been proposed to em-

ploy external friction, as the best substitute for the want of it. The proposal is plausible, though, I believe, it has rarely been carried into execution, at least with regard to adults. I have, indeed, known it practised in a few cases of young children, apparently with an excellent effect. The friction must be assiduously applied, and the practice persisted in for a considerable length of time, to afford any prospect of deriving much benefit from it.

Another very general, and very important external application, is the bathing of the body in water. The bath may be either warm or cold, simple, or impregnated with various medicinal substances.

Cold bathing, especially cold sea-bathing, is a remedy universally employed in scrofula, and, I believe, with great advantage in many cases; for it not only appears to improve the patient's general health and strength, but likewise to promote the detumescence of enlarged glands, and the resolution of indolent swellings in the joints, even after they had attained a considerable size, and had existed for a great length of time. But, in order that cold bathing may be

practised with safety and advantage, the constitution must have vigour to sustain the shock of immersion without inconvenience. If the immersion be succeeded by a general glow over the surface of the body, and the patient feels cheerful, and has a keen appetite, we may conclude that he agrees with the cold bath; but if he shivers on coming out of the water, continues chill, and becomes drowsy, we may be assured that the practice of cold bathing does no good, and had better be omitted.

Although the cold bath acts as a tonic, and invigorates the system, when judiciously employed, it produces a contrary effect, when the circumstances of the case are not favourable to the practice. It is, therefore, of consequence to ascertain the state of the patient's strength, before cold bathing is recommended; and if there be reason to suspect that the strength is too much reduced to ensure the re-action of the system, it would be imprudent to advise the cold bath in a patient so weakly. Whenever, therefore, the state of strength is doubtful, all trials should be made with great caution, and the practice intermitted, if the effects do not

soon appear to be beneficial. Cold bathing is most likely to agree with weakly patients, when the immersion in the water is momentary; and experience sufficiently proves the superiority of salt water bathing over fresh water bathing.

When much doubt is entertained with regard to the probable effects of cold bathing, it will be a prudent precaution to premise the use of the warm bath, which acts upon different principles, and is serviceable in those cases of scrofulous weakness which forbid the use of cold bathing. One great advantage of warm bathing is to relieve a certain dryness of the skin, which often accompanies scrofulous emaciation and weakness, and occasions much oppression and distress. A small number of immersions is, in general, sufficient to accomplish this object, and to prepare the patient for the safe and beneficial use of the cold bath; though, when a great degree of scrofulous debility prevails, it is advantageous and necessary to continue the course of warm bathing, at the rate of two or three immersions a-week, for a considerable length of time.

In estimating the comparative merit of cold bathing and warm bathing, in the cure of scrofulous complaints, my own experience, together with the result of different conversations on the subject with some of the most judicious practitioners of my acquaintance, would lead me to bestow much more commendation on the effects of warm bathing. I should not even be inclined to circumscribe the practice to cases of emaciation and debility, since, from observation, I am fully satisfied with regard to the beneficial effects of the warm bath to patients of plethoric constitutions, who were much affected with swelled scrofulous glands. Several of those instances occurred in young women, about the prime of life, who were in all respects healthy and vigorous, abating the swellings of the glands, and those symptoms of distress which were connected with fulness of blood.

The sensation of the warm bath is exceedingly grateful to most patients, and the practice is universally safe. It may be employed at all seasons of the year, and in all weather, without danger or inconvenience; the risk of

suffering from exposure to cold, immediately after immersion in the warm bath, having been much magnified by prejudice. There is not even any good reason to believe in the existence of such a risk. The precautions, however, which are employed to avert it, are perfectly innocent; and, provided they do not impose any unnecessary and incommoding restraints upon the practice, may be encouraged, so far as to relieve the patient's mind from uneasiness and groundless apprehensions.

From twelve to twenty minutes is, in general, the time recommended for immersion, at the commencement of a course of warm bathing, with a temperature of water varying from  $90^{\circ}$  to  $100^{\circ}$  degrees of Fahrenheit's thermometer, according to the feelings of the patient. Persons much accustomed to the practice of warm bathing, in general remain longer in the bath at a time, and use a higher temperature of heat.

It requires many weeks, and sometimes several months, to ascertain the full effects of warm bathing in relieving scrofulous complaints; but, as the practice is not attended

with any inconvenience, nor followed by any bad consequence, there can be no reason to intermit the course, till the trial is completely satisfactory : And I am convinced, that the practice of warm bathing, in cases of scrofula, will be more universally adopted, after the knowledge of its beneficial effects is more widely diffused.

Saline and sulphureous impregnations are supposed to have great effect in increasing the medicinal virtues of the warm bath; and, therefore, sea water, and natural sulphureous waters, are greatly preferred in the treatment of scrofulous cases. There is certainly no objection to the employment of these impregnated waters ; though I do not believe that their relative efficacy has been appreciated with much exactness. If, however, any prepossession in favour of medicinal impregnations encourages the use of the warm bath, I should not be solicitous to discredit an opinion which leads to so salutary a practice, and never can be detrimental.

It is likewise a frequent practice to employ friction, with some stimulating substance, in

order to promote the efficacy of the warm bath; and stimulants may no doubt be used externally, with the greatest hope of advantage, in certain cases of scaly scrofulous eruptions, and in some of the more solid kinds of swellings.

Scrofulous patients commonly resort to the sea coast, and to natural mineral springs during the summer months. The time of these excursions is very much regulated by fashion, without considering, that it is of great consequence to go early in the season, in order that the invalid may enjoy the full benefit of all the good weather of the year, to complete and confirm that recovery, which the effects of the bathing may have happily begun.

### *Climate.*

The disadvantages of a bad climate, and of an unfavourable local situation, can alone be radically surmounted by changing the place of residence to one more salubrious; or, if such a change is not practicable, by adopting the best artificial substitute to correct the incon-

venience. As cold and moist air is found to be so highly prejudicial in scrofula, we endeavour to substitute an artificial atmosphere, which may be warm and dry, and which thereby may, as far as possible, counteract the pernicious tendency of an inhospitable climate. Artificial fires are equal to support a moderate and proper temperature within doors ; and persons of delicate constitutions, who are threatened with an attack of scrofula, ought to be permitted to go abroad in winter only for a short time at once, so that they may not be chilled, nor suffer any injury from long continued exposure to cold and damp air.

The clothing of scrofulous patients ought to be regulated upon similar principles of protection : it should always be sufficient to protect the wearers completely against the inclemencies of the weather, and to keep them quite comfortable and warm. The common fault in this country is to go too thinly clad, which is one reason why delicate people feel the vicissitudes of the weather so severely.

The only other circumstances of general regimen which now remain to be noticed, respect

the purity of the air of respiration, and the measure and regularity in the times of repose.

It is the unavoidable misfortune of the poor in great towns to inhabit cellars, and cold, confined damp, airless places. Those of better condition do not now suffer from the same cause, in consequence of the great attention which has of late been bestowed on the construction and ventilation of houses.

But if the rich be exempted from the misfortune of breathing impure, tainted air, they are often exposed to suffer voluntary inconvenience, from the lateness and irregularity of the hours which they keep ; for although the hour of going to rest be purely optional, yet the prevailing manners of the times have established hours for amusement which are not the most conducive to health ; and as plenty of sleep, at an early hour of the night, is most refreshing and invigorating, so any deficiency or irregularity in these respects is extremely exhausting and enfeebling. Every weakly scrofulous person, therefore, who wishes to preserve or recruit his health and strength,

should go early to bed, and endeavour to procure from eight to nine hours of sound sleep.

*Of particular Medicines.*

After having explained the general regimen of health adapted to the management of scrofulous constitutions and scrofulous complaints, our attention is naturally directed to the consideration of the particular remedies which may be employed with greatest hopes of advantage in scrofulous cases.

The medicines which are given for the cure or prevention of scrofula, are either such as are supposed to act upon some general principle, or such as are supposed to possess a specific virtue in the cure of this distressing disease.

A draught of salt water is recommended almost indiscriminately to every patient who is advised to use sea bathing. It acts as a purgative, and proves a serviceable medicine, so far as purging is indicated in the case under management. The water of the sea, however, is not nearly so palatable as the solutions of

many other neutral salts, and its medicinal virtues do not appear to be superior. It is therefore prescribed rather from accidental convenience, than from any well grounded preference over various other medicines of the same class. There would even appear to be some degree of prejudice in the promiscuous prescription of a particular medicine, without adverting to those limitations and restrictions, which a more accurate knowledge of principles would suggest to a practitioner. The practice of purging, however, to a certain extent at least, is fortunately well adapted to promote the cure of most scrofulous cases, although the object to be accomplished, by the administration of purgative medicines, is not always precisely the same.

In many cases of hereditary predisposition, scrofula seems engrafted on a constitution otherwise healthy and vigorous, where the patient feels no weakness, nor suffers from any depravity in the functions of the stomach, and has a tendency to fulness and corpulency. A continued course of purgative medicines, in cases of this kind, often proves highly bene-

ficial, by procuring a frequent and copious evacuation of the bowels, and thereby contributing to reduce that disposition to fulness, which very much favours congestions and glandular obstructions. The derivation of purging promotes the resolution of such congestions and tumefied glands; and the course may be continued moderately till a sensible diminution of fulness ensues, provided the patient be strong enough to bear the evacuation without inconvenience.

In the more distressing and more frequent form of attack, when scrofula is induced, or at least very much promoted, by long continued exposure to the operation of sedative causes, there is no fulness of the system to reduce by the use of purgative medicines; it would therefore be absurd to give them with this view. Their use, however, is often indispensable, to remove habitual costiveness, attended with an accumulation of faeces in the intestines. The dose requisite for this purpose is often very great. But we ought to recollect, that the amount of the effect, not the magnitude of the dose, is the standard by which we are

to regulate our practice ; and as an unhealthy accumulation of fæces proceeds from a loss of tone in the actions of the intestines, it is not surprising that stronger doses of medicines should be requisite to correct costiveness in such cases, than to produce purging in cases where the bowels still retain their natural state of activity. The bowels, however, frequently retain their natural state of activity in the former class of cases, in which costiveness is not necessarily a concomitant symptom, and in which, consequently, more copious evacuations are procured by smaller doses of medicines.

In cases of long continued costiveness, there is often a prodigious accumulation of fæces, so that a great quantity has to be expelled before the stools become natural ; yet notwithstanding this very copious evacuation, which would exhaust a person in health, the patient acquires plumpness and strength under this course of purgative medicines. Nor is it difficult to understand the reason of this difference. When an unhealthy accumulation exists, the operation of purgatives removes a load which oppresses the system, and, by the diminution of

the fæculent mass, relieves the power of digestion. The appetite, therefore, improves; the body is more fully nourished; and the alarming degree of emaciation, which accompanied want of appetite and want of food, begins to disappear. But when the alvine evacuation was previously regular and plentiful, any considerable increase in the quantity of the discharge, withdraws from the body some portion of the destined nourishment, and, consequently, tends to reduce any luxuriant fulness, which a more plentiful supply of food had occasioned and supported.

This exposition of principles explains the circumstances which render purgative medicines so generally useful in the cure of scrofula, and points out the modifications which are requisite to be observed in applying the practice to the different forms and stages of the disease. It is obvious, for example, that in cases of scrofulous atrophy and emaciation, proceeding from loaded bowels, any excess of purging, after the accumulation has been removed, would prove detrimental, by producing a hurtful reduction of strength; while, on the

other hand, any deficiency in point of evacuation, so that an oppressive quantity of faeces was still allowed to remain, would frustrate the intention of the practice. In this case, then, the total expulsion of the morbid accumulation, together with the establishment of a regular alvine discharge, affords an exact measure of the course of purgative medicines requisite to accomplish the object in view: Any excess, in either extreme, makes a considerable difference in the utility of the practice.

But the delicacy of management is not nearly so great, when scrofula is connected with more vigour of constitution and plumpness of body; for although there doubtless is a certain degree of evacuation best adapted to the circumstances of the case, yet a little deviation, in point of deficiency or excess, does not make so material a difference to the patient. Neither is there any great risk of deviating far from the proper standard, if we employ a protracted course of moderate purgatives, in preference to a more powerful one of shorter duration; for the impression which

the medicine makes, is apparent in the progress of the changes; and it is in our power, at any period of the cure, to suspend the course, or to increase its activity, according to the circumstances of the case. Upon the whole, however, this state of the disease requires an uninterrupted course of purgative medicines for a considerable length of time.

The idea of prescribing sea water in large quantity, with a view to wash out the lymphatic system, is too fanciful to merit a serious refutation. It is even doubtful, whether saline purgatives extend their action beyond the limits of the alimentary canal and urinary organs; or, supposing their sphere of action to be more extensive, there wants evidence to prove that their power of penetration is confined to a particular set of parts. We are, therefore, only entitled to regard saline solutions as a cooling and convenient class of purgatives, which may be given with great advantage when any medicine of this class is required: any farther, however, than to relieve the intestines from an oppressive accumulation of faeces, or, if necessary, to reduce a tendency

to fulness in the system, the use of purgative medicines is not much indicated in the cure of scrofula.

But from what has already been stated, it appears that very few cases of scrofula occur, in which purgative medicines are not of use when employed with discretion, or with proper attention to the circumstances of the patient. Several mineral springs, besides saline ingredients, also contain sulphureous impregnations, which are supposed to increase the medicinal virtues of the waters. Sulphur appears to pervade the whole body, and may thus be applied in immediate contact with every part affected with scrofulous action.

But whether this explanation of the *modus operandi* be just or not, there is no doubt of the celebrity of sulphureous waters, founded on the public estimation of their efficacy in the cure of scrofula. The reputation of Harrowgate and Moffat is universally known; and although their powers, as affording an efficacious remedy against scrofula, may possibly be overrated, I am yet inclined to entertain a favourable opinion of their virtue in cases

of scrofula. Upon this account, therefore, together with some collateral advantages which attend a course of mineral waters at Harrogate and Moffat, I have no hesitation in recommending both places to the attention of scrofulous patients.

But calomel \* is by far the most celebrated of all the purgative medicines which have ever been employed in the cure of scrofula; and it is, undoubtedly, a very serviceable remedy in many stages of the disease. In order, however, to enjoy the beneficial operation of calomel with safety, we must be careful to avoid giving it in so large a quantity as to produce the proper specific effects of mercury in their full extent; for a deep and lasting mercurial impression on the system, aggravates every symptom of scrofula. The truth of this position is amply confirmed by the unanimous testimony of all practitioners, who have been obliged to employ severe courses of mercury for the cure of venereal complaints in persons of scrofulous constitutions. So infallible, indeed,

\* Sub-murias hydrargi. Pharm. Edinens. 1803.

are the ruinous effects of mercury in scrofula, that, in many instances where mercury has been administered for the cure of venereal complaints, it has excited symptoms of scrofula, which, increasing gradually in severity, proved fatal at last.

Calomel, however, when given cautiously in moderate doses, so as to act merely as an alterative or gentle purgative, agrees well with scrofulous complaints. Like other preparations of mercury, it communicates a general stimulus to the system, and contributes more than any other medicine to discuss tumours, and resolve indurations of a scrofulous nature. This alterative course, however, requires to be steadily supported for a sufficient length of time, to produce the desired effect; and, during its continuance, there must not be the smallest remission of vigilance and attention on the part of the practitioner, lest the effects should unexpectedly exceed the prescribed bounds, and produce salivation and severe mercurial action. But when these inconveniences are anticipated by foresight, and prevented by cautious management, calomel may

be given with the utmost confidence, and with the greatest prospect of advantage.

It is not easy to establish any fixed rule with regard to the quantity of calomel which ought to be given for a dose, or with regard to the length of time for which the course ought to be continued, on account of the variable effects which it produces on different constitutions, and the great diversity in the character of scrofulous attacks. The regulations of these particulars, therefore, must be trusted entirely to the discretion of the attending practitioner, who ought always to be equally attentive to guard against violent mercurial action, and violent purgative effects in the administration of calomel. A few weeks trial will be sufficient to determine the probability of removing or relieving the complaint. One or two, or at most three grains, given daily, is in general a large enough dose in such cases.

The utility of calomel in reducing swellings of the glands, and of other soft parts, the class of cases in which it is most usefully employed, does not extend to similar affections of the bones; at least, I doubt much whether calo-

mel is ever of service in such cases ; and the experiment may even be hazardous, by inducing practitioners to increase the dose imprudently, in order to avoid the mortification of a disappointment.

### *Tonics.*

Whatever may be the nature of the operation of purgative medicines, they certainly do not act directly as corroborants, nor do they directly invigorate the constitution. For this purpose, it is necessary to recur to the use of medicines endowed with far other virtues, and which are supposed to impart strength to the body. To what extent this object can be accomplished is a matter of some uncertainty ; although a numerous class of medicines, under the name of tonics, are employed to fulfil the indication.

The sensible qualities of vegetable tonics are bitterness and astringency, in various degrees and proportions. Peruvian bark, or cinchona, is the most esteemed, and is very universally

employed in cases of scrofula. The effects are undoubtedly beneficial when the circumstances of the case are favourable to the operation of the cinchona; but, to insure this benefit, the bowels must be previously cleared of any morbid accumulation of faeces, otherwise the cinchona lies an undigested load on the stomach, proves a source of oppression, and does harm instead of good. Neither is it adapted to that state of scrofula in which any tendency to fulness prevails, or when the glands are swelled and indurated, or congestions are present to any extent. But when none of these objections to the administration of cinchona exist; when weakness is a principal symptom; when the strength is to be supported, and a languid action to be roused into more vigorous exertion, cinchona may be usefully employed, and has obtained the character of an excellent medicine. Its virtues are best calculated to meet the indications of those cases where there are extensive ulcers, or large abscesses, with copious exhausting discharges of purulent matter; and, in general, to communicate that degree of energy to the actions of the system,

which tend to support and confirm the patient's strength. The simple powder is the preferable mode of exhibition, when the stomach can digest a sufficient quantity without oppression ; but if a dose in substance oppresses the stomach from indigestion, then the lighter preparations of decoction or infusion ought to be substituted in its place. Two or three doses a-day is all that can ever be requisite. A course of this kind may be continued a fortnight or three weeks without interruption ; it ought then to be intermitted for eight or ten days, and resumed again in like manner. There is no sudden change to be effected ; and, therefore there is not the same urgency to press the use of cinchona, as in cases of intermittent fever.

The admirers of this favourite medicine are evidently disposed to overrate its virtues in the cure of scrofulous complaints, and consequently to prescribe it somewhat too indiscriminately. The frequency of prescription, indeed, is perhaps not quite optional, since, from its popularity and high estimation with the public, invalids and their relations are but too apt to controul practitioners, with more importunity

than prudence, by obtruding cinchona unseasonably on their attention. This kind of indiscretion is but too prevalent with patients; so that practitioners must often yield to the current of prejudice, and indulge the wishes of patients and their friends, when the indulgence can be granted without any improper sacrifice. From these circumstances, cinchona has been long very universally employed in the cure of scrofulous cases; but, so far as it has been introduced into public notice, from circumstances extraneous to experience and the opinion of practitioners, the universality of its use affords no just criterion of its efficacy; so, on the contrary, the failure of success, in a multitude of incurable cases, is no proof of its inutility. And though I should propose a considerable abatement from the sanguine representations of its panegyrists, I am still willing to give cinchona a high place in the catalogue of tonic medicines useful in the cure of scrofula.

It is unnecessary to make any additional remarks on the virtues of the other vegetable tonics, after having selected cinchona as an

instance of the most powerful. If, indeed, cinchona is peculiarly disgusting to the patient, or loathsome to the stomach, or if there be any accidental reason for setting it aside, I should propose to give colombo or chamomile, or some other vegetable bitter, conjoined with an agreeable aromatic, as the best substitute. The addition of an aromatic, even to cinchona, is sometimes useful and necessary.

Of the mineral tonics, iron and sulphuric acid are the most valued for their virtue in the cure of scrofula. Iron is the only metallic substance in whose safety and efficacy I am inclined to repose much confidence. It is not, indeed, so popular a remedy as cinchona, but, in my opinion, it acts more speedily and more powerfully on the constitution; at least, I have met with several instances in which the patient has experienced very sensible benefit in the course of a few days, owing apparently to the good effects of chalybeate medicines. Iron is, besides, less liable than cinchona to oppress the stomach with indigestion, or to produce accumulation in the bowels; and, upon these ac-

counts, is a more unexceptionable medicine. The virtues of iron are supposed to be more peculiarly appropriated to the purpose of invigorating the system, when oppressed with general languor, than for the cure of any particular symptom. The dose may be augmented so long as the stomach can bear the quantity without oppression; and the course may be continued without interruption for some weeks.

The preparations of iron are numerous; but the carbonate of iron, the muriatic solution, and chalybeate waters, are the preparations most generally employed; and are, upon the whole, very useful and convenient preparations. It is most advisable to give a dose twice a-day, about noon and in the evening.

The virtues of the other metallic substances, in the cure of scrofula, are not so well ascertained. Many of them are very severe in their operation, and some of them even highly dangerous: I am, therefore, inclined to confine my recommendation of the metallic preparations exclusively to the use of chalybeates.

The sulphuric acid is a favourite medicine with all practitioners; it is palatable, grateful

to the stomach, and agrees with all forms and stages of scrofula. It is peculiarly adapted to that state of fever which is connected with the putrid sloughs that are often formed on the inside of large tumours, when first exposed to the air, and to that state of weakness which disposes to copious perspiration upon very moderate exercise. It forms a most refreshing drink, when diluted with a large proportion of water, and seems capable of enabling the constitution to support a degree of oppression, which otherwise it could hardly withstand. There is no very precise limit to the quantity which ought to be taken ; and, therefore, when properly diluted, the patient is, in general, permitted to drink as much of the mixture as he finds agreeable.

Upon the whole, cinchona, iron, and sulphuric acid, are the most efficacious remedies of the class of tonic medicines ; though, after all, the whole class of tonics can only be regarded as auxiliaries which afford collateral aid to the other means of cure, which are recommended for the relief of scrofula. If they answer this purpose, it is a great point gained ; since, in a

disease so obstinate, and so difficult to cure, nothing ought to be omitted which promises to be of use.

*Specifics.*

With regard to the remaining class of remedies, those remedies which are supposed to possess specific virtues in the cure of scrofula, I confess my confidence is not great. The boasted efficacy of almost the whole of them is now universally discredited ; and, consequently, the use of the medicines themselves is abandoned. Yet, notwithstanding the experience of past delusions, every day produces new specifics, to supply the place of the obsolete and disregarded ; and the unbounded confidence which is reposed in them, for a time, almost exceeds the belief of those who are unacquainted with the facility with which the judgments, even of able and discerning men, may be misled on such occasions.

It would be an endless task to enumerate all the different specifics, which the credulity of practitioners has dignified with imputed powers. I shall, therefore, confine my

observations to a few of the most celebrated of modern times.

Dr Stork, of Vienna, celebrates the specific virtues of cicuta (the conium maculatum of Linnaeus) in the most extravagant terms of commendation. It was universally tried all over Europe, upon the recommendation of this respectable practitioner; so that a fair estimate of the medicinal virtues of cicuta, in the cure of scrofula, may be made from the result of very general and extensive experience. Its original character, as an invaluable acquisition in the cure of scrofula, was certainly much overrated; although it appears to possess some valuable qualities, which may be usefully employed in certain modifications of the disease. I am inclined to ascribe most virtue to cicuta in changing the condition, and forwarding the cure of certain malignant scrofulous ulcers, which counterfeit the appearance of cancer. I have likewise found it of use in promoting the cure of certain singular scrofulous affections of the tongue, which bore a near resemblance to some rare venereal cases. Its efficacy in resolving indurated glands is unquestionably

much magnified.<sup>6</sup> In a few cases, however, I have been inclined to ascribe to the effects of cicuta some share of merit in promoting the resolution of scrofulous swellings of the mammae. Upon the whole, therefore, although I would not reject cicuta from the catalogue of medicines useful in scrofula, I am not disposed to rate its virtues as of great and general utility.

Cicuta requires to be employed to the full extent which the constitution can bear with impunity, in order to enjoy the full benefit of its curative powers. The limit of the dose, therefore, is to be measured by its effect in producing incipient symptoms of giddiness or nausea, which disturb the functions of the head or stomach. The course requires to be continued a great number of weeks, before the good effects of its operation are perceptible.

### *Muriates of Barytes and of Lime.*

Of the Muriate of Barytes I shall say little; not only because its virtues were always of

doubtful existence, and its immediate effects upon the constitution extremely unsafe; but likewise because the use of it has been entirely supplanted by the introduction of the Muriate of Lime, a preparation of nearly similar chemical composition, and which has already attained a much higher degree of reputation.

The muriate of lime, according to the opinion of the celebrated Dr Black, forms the basis of Dr Ward's white drop. I found the same preparation strongly recommended for the cure of scrofula, in some periodical French publications, a good many years ago; and I then tried it in different scrofulous cases: But the success of my trials was not encouraging, and did not induce me to form a high opinion of the medicine. Since then, indeed, the reputation of muriate of lime has revived, and has found a multitude of patrons, prepared and zealous to put its virtues to the test of very extensive practice. In this state of probation, the absolute merit of the medicine must remain for some time undetermined; for, after the numberless disappointments which have already been experienced in matters of this kind, it would be pre-

mature to appreciate the medicinal virtues of muriate of lime, agreeably to the sanguine expectations which the supposed success of some fortunate cases may have inspired. Nothing but a series of steady and uniform results can stamp the real value upon any medicine; and in a disease of so frequent occurrence, which affords daily opportunities to vary the practice, every medicine will soon find its true level. Prepossessions in favour of a new medicine; prejudices to its disadvantage; the panegyrics of its patrons; and detractions of its opponents, counterbalance each other, and stimulate the exertions of all parties to extend the limits of their inquiries, in order to verify their own favourite statements. I have already collected information, both oral and written, in favour of surprising cures performed by muriate of lime; but until these favourable reports shall be actually realized, by the accomplishment of many undoubted cures, it will not, I presume, be thought an unphilosophical degree of scepticism, to suspend forming a final judgment on so interesting and important a subject: For, notwithstanding the enthusiastic encomiums

which have of late been so lavishly bestowed on the specific, and almost infallible antiserofulous virtues of muriate of lime, I shall not be much surprised, if, when novelty has lost its charm, fame shall be as silent in celebrating the praises of muriate of lime, as it now is with regard to those of muriate of barytes.

Muriate of lime, in order to produce the maximum of effect, requires to be given in much larger doses than what practitioners have usually been accustomed to prescribe. One of the most successful imputed cures which has come to my knowledge, was said to have been accomplished under a course of muriate of lime, consisting of an ounce of the saturated solution taken three times a-day, and continued for many weeks\*.

\* Since this sheet went to the press, my colleague, Professor Themson, has favoured me with the following observations on the effects of muriate of lime.—He employed muriate of lime in various cases of scrofula, without having derived benefit from it in a single instance. Some patients, indeed, he admits, got well, while under a course of muriate of lime; but then he had no reason to ascribe the cure to the effect of the medicine. In other cases, on the contrary, the

I should be sorry if the doubts which I have ventured to express, concerning the efficacy of different remedies, extolled for their power of curing scrofula, were supposed to imply any unreasonable degree of incredulity, or to convey an idea of any intention to depreciate their real virtues, or to object to their use in practice. This is by no means the case. My sole view in stating these doubts is to have the virtues of the medicines impartially investigated, in order that they may be ascertained with precision : For, nothing is more unfavourable to the progress of knowledge, than the misfortune of resting satisfied with inaccurate information in matters of importance, and of placing implicit reliance where it is not merited. It is

muriate of lime produced severe sickness and oppression at stomach, and the patients got daily worse, till the muriate of lime was intermitted, and other medicines employed. The relief experienced from the intermission of the muriate of lime left no doubt with regard to the injurious effects which the use of it had produced ; and, from extensive experience, and accurate observation on the subject, Professor Thomson is satisfied, that muriate of lime is attended with prejudicial effects in many cases of scrofula.

a misfortune which both damps all exertion to prosecute the investigation of the subject, and leads to inefficient practice, by recommending confidence in medicines of little value. A fair exposition of the actual state of knowledge, therefore, in place of proving injurious to science and improvement, proves of the greatest benefit, by pointing out the deficiencies to be supplied, and by enabling the practitioner to treat every case in the most judicious manner, which the present state of knowledge admits, by giving every instrument of cure its proper share of employment:

In the preceding observations, I have laid down the general principles which ought to regulate the management of scrofula; and I have pointed out the course of regimen, and the particular remedies which experience has shewn to be the best calculated to relieve scrofulous patients. The doctrines delivered, lead to the most effectual practice in preventing the appearance, or mitigating the effects of scrofula, provided the practice be begun early in life, and persisted in with steadiness, till the dangerous period be past ; for it has often been re-

marked, that if a person attains the age of puberty without suffering from an attack of scrofula, he has a great chance to escape during the remainder of life. Great attention, therefore, is due to the health and management of children when there is the most distant suspicion of a scrofulous taint prevailing in the family.

#### *Local Treatment of Particular Symptoms.*

All scrofulous cases which come under the management of a surgeon, are attended with external local symptoms, which are necessarily objects of the most important consideration in the management of the cure. Many of these external symptoms undergo periodical variations, corresponding to the changes of the seasons ; scrofulous swellings subsiding, and scrofulous sores healing up and cicatrizing during the fine weather of summer and autumn. Whether all these favourable changes be entirely owing to the previous amendment of the patient's general health, is a point quite unne-

cessary to discuss, since the powerful influence of constitutional good health, towards the amelioration of local symptoms, is sufficiently known for every useful purpose of practice. The restoration of the patient's general health often effects the cure of local scrofulous complaints, without the assistance of any particular topical treatment; but this, though a very general, is not an universal consequence of recovery from a constitutional attack; inveterate local complaints often remaining unchanged after the general health is fully re-established. The continuance of these local complaints may even be of sufficient importance to affect the patient's general health, and to afford the leading indications for the management of the constitution; so that, in the regulation of diet, and of the other articles of regimen, it is frequently of more importance to regulate the management of the case according to the state of the local symptoms, than according to the circumstances of the patient's general health. In such a case, the local symptom becomes the great dictator of practice, and may demand either a more abstem-  
i

ous or a more liberal diet than what would otherwise be requisite. I had an excellent opportunity to observe an illustration of this principle in two well marked cases, which were the counterpart of each other. One of them was in the person of a lady, who suffered from a scrofulous swelling on the back of her hand. The case was treated in the usual manner; the lady being enjoined that regimen of regular exercise, and that allowance of nourishing diet, which is in general most conducive to the cure of scrofulous complaints: but, upon trial, she found that a very moderate degree of exercise raised a temporary heat in her hand, and made the swelling increase, and become painful. In like manner, an additional glass of wine produced similar inconvenient effects; so that the irritability of the swelling rendered it necessary to adapt the general management of the health to the state of the local complaint; to diminish the allowance of food, and to recommend quietness and rest. This change of management soon produced the desired effect; and afforded an instance of a local complaint, which required a regimen

less stimulating than what corresponded to the constitutional treatment of the patient.

Another case occurred soon after, in which the condition of circumstances was wholly reversed; the state of the local complaint requiring a more nourishing and more stimulating diet than what was otherwise indicated. A young girl received a severe blow on the head, which produced symptoms of an oppressed brain, accompanied with a wound over the region of the frontal bone. The violence of the accident, and suspicion of internal injury, required adherence to the most abstemious regimen of diet, together with the employment of the most effectual remedies against inflammation and effusion. The cure was accordingly conducted upon the principles which these indications suggested, and the progress of the recovery, so far at least as regarded any internal *læsion*, was regular and steady; so that the leading symptoms of the case seemed to agree perfectly with the plan of management which had been adopted. But while the internal injury was thus advancing progressively to a fortunate termination, and promised a

speedy restoration of health, the external wound did not continue to exhibit a corresponding favourable aspect. After the regular series of changes, which take place in a healing wound, had advanced in a healthy manner, and without exciting any suspicion of scrofula, appearances gradually changed, and, in the course of fifteen or sixteen days from the date of the accident, exhibited all the characters of a true scrofulous ulcer ; the edges became glassy, verging towards callosity ; the discharge tenacious, fetid, and more transparent ; there was no regular diminution in the extent of the ulcer, while its aspect was evidently degenerating. These unwelcome changes excited alarm, and suggested doubt respecting the utility of persisting in the system of low diet, which had heretofore been prescribed ; and as there was now no reason to be apprehensive of inconvenience from a cautious amelioration of diet, the diet was gradually improved in quantity and in quality, a moderate portion of wine and of animal food being allowed daily. This allowance of a more liberal diet soon produced an obvious amendment

in the appearance of the sore ; the unpromising symptoms gradually assumed a healthy aspect ; and the cure was finally completed, without any farther interruption.

The history of this case illustrates two points of doctrine, one pathological, the other practical. In the first place, it shows the tendency of external violence, more especially of injuries of the head, to excite attacks of scrofula, which probably would not otherwise have appeared. In the next place, it confirms the truth of that practical maxim, which recommends nutritious diet in certain cases of scrofula. There was no appearance of amendment; on the contrary, there was an obvious degeneracy in the state of the sore, until more latitude was allowed in the article of food. But this indulgence, which became so necessary to promote the cure of the local complaint, towards the latter period of the case, was inadmissible at the beginning, on account of the alarming affection of the head.

In all cases, the simultaneous existence of contradictory indications presents one of the greatest difficulties in practice. It is obvious-

ly impossible to fulfil both indications at one time; so that the surgeon is often obliged to make a compromise between two opposites which cannot be reconciled, or to sacrifice one of the indications, when it is comparatively of little value in respect of the other. In the former of the two cases which was the subject of reference, the difference between the opposite indications might be called a permanent quantity, as the swelling on the hand was a chronic complaint, and the state of the constitution uniform; so that, with regard to this point, it was immaterial at what period of the case any alteration was made in the regimen of the diet. Neither was it a matter of much delicacy, in other respects, since the balance was not so nicely poised as to subject the patient to danger by the experiment. A diminution or augmentation of allowance required time to operate, and exhibit visible effects, which were always apparent in sufficient time to permit of a seasonable change, when the practice appeared to decline too much to the one or to the other extreme. In this way, the variation might be said to oscil-

late within determinate limits, which no prudent practitioner had any chance to exceed, and in which repeated trials would at last ascertain that mode of living which was best accommodated to the circumstances of the case.

The second case was a direct contrast to the first, in some of the most essential particulars. The difference between the contradictory indications was perpetually varying, which made any steadiness of the compensation impracticable; for those scrofulous symptoms, which afterwards became an object of the most interesting attention, had no existence at the commencement of the case. Or, supposing them to have broken out at once in the utmost virulence which they ever attained, their consequence was completely sunk in the superior importance of the internal lesion of the head; for, at all times, every other consideration must yield to the urgent symptoms of an oppressed brain. There is no temporising in such cases; and if there was any interference between the two sets of indications, there could not be the smallest hesitation in making a sacrifice of those which regarded the

scrofulous symptomis; because, whenever there is any tendency to fulness about the head, the slightest transgression of a regulated diet may be instantly followed by the most dangerous consequences, and produce irretrievable mischief; whereas, a protracted course of abstinence, though it may aggravate scrofulous symptoms, does not render them incurable. Thus there arises an absolute necessity to make a sacrifice of one set of opposite indications, when the disparity of their value is so great.

With regard to the variation in the relative importance of contradictory indications, it is plain, that how transcendent soever the superiority of the more urgent indication may be at first, yet if its urgency be constantly on the decline, while that of its opposite is constantly on the increase, the difference between them will insensibly diminish till they pass one another, and till the urgency of that which was originally the inferior comes at last to preponderate. After this manner the most imperative indication ultimately vanishes altogether, and is no longer an object of attention; on the contrary, the nascent degeneracy of a sore

which seems undeserving of notice at its commencement, will, by increasing malignity, attain a degree of consequence which demands the most active interposition. In these opposite progressions, there is a point of time at which the relative importance of the contradictory indications is transferred from the one class of symptoms to the other ; and, in the management of certain interesting cases, it is a matter of equal delicacy and importance to seize the moment of transition with accuracy, lest, by an injudicious perseverance in the original line of practice, effects may be produced which cannot afterwards be counteracted.

The two cases which gave occasion to these remarks afford apposite illustrations of the principal doctrines respecting contradictory indications.

There is likewise another circumstance of much importance in practice. The scrofulous contamination may exist in a greater or lesser degree of malignity, and therefore mingle with any common diseased action in various proportions ; so that a swelling or sore, or any

other symptom, may be more or less of a scrofulous nature. The treatment, in such cases, necessarily varies, accordingly as the healthy or scrofulous action predominates. It is no unusual occurrence for an attack which began in the form of an ordinary healthy inflammation from an external injury, to degenerate gradually into a scrofulous affection, which ultimately terminates in the most malignant form of scrofula. The debility which the continuance of disease induces is, in some measure, the parent of this transition: It is, therefore, a matter of the greatest consequence to accelerate the cure during the incipient stages of the attack, in order to diminish the risk of the supervention of scrofulous action, by abridging the time, and saving the patient's strength. Active practice, at the commencement of an attack, when any suspicion of a latent scrofulous taint excites alarm, affords the most probable prospect of abridging its duration, and averting the evil. This practice, too, may the more safely be recommended, as healthy inflammation requires and bears more copious evacuations than the scrofulous, and has also more of a natural tendency to ter-

minate in resolution; at the same time, there is often considerable delicacy of management requisite to regulate the amount of the evacuations; for, if the attempt to stop the progress of the inflammation does not prove successful, then the profuse evacuations which have been employed at first induce a degree of weakness, which favours the supervention of scrofula, and aggravates the severity of the attack. It is obviously a difficult matter to investigate the nature of these complicated cases with accuracy, and to treat them after the most judicious manner; the discretion of the attending practitioner, directed by the existing circumstances of the case, can alone accomplish this object.

External violence is a frequent exciting cause of scrofula. When the injury is of the nature of an incision, it has been known to terminate in the formation of a scrofulous sore, especially if the original injury has been severe and extensive. After amputation of the larger extremities, of the thigh in particular, the stump occasionally assumes somewhat of scrofulous action. This is always a disagreeable occurrence, and retards the progress of the cure: But as the

scrofulous attack is seldom of the most malignant kind, the cure, in general, proceeds regularly, though slowly; till, at last, the sore heals up, and forms a permanent cicatrix. In a few cases, indeed, the surface of the stump becomes covered with foul sloughs, which do not readily separate, and the ulceration spreads among the interstices of the muscles, producing great devastation. Secondary haemorrhage takes place from the erosion of some blood vessels; and by the loss of blood, and the irritation and copious discharge of an unhealthy sore, the patient's strength is gradually exhausted, till at length he sinks under the pressure of disease. This termination is fortunately very rare; but as it appears to be connected with a prolongation of the cure, it becomes a matter of infinite importance to obtain a union of the lips of the wound by the first intention. When the failure of the healing process arises from any radical fault in the constitution, the accident may be unavoidable; nevertheless, the attempt ought always to be made, in performing operations on scrofulous patients, in order to relieve them, as

much as possible, from this adventitious danger.

Attention to these principles will naturally inspire caution in advising the application of leeches to the margin of an inflamed scrofulous ulcer, with a view of relieving the marginal inflammation, lest the bites of the leeches, in place of healing, should produce troublesome sores. This accident, indeed, is not a matter of the first importance ; but I think it right to suggest the caution, from having had occasion to witness the inconvenience of the practice. The disappointment is the more vexatious, from being unexpected ; and although the accident may be represented as a trifle, yet no patient is contented when he finds his complaints aggravated by those very means which were employed to relieve or remove them.

The bites of leeches, when the leeches are applied to scrofulous swellings, where the skin is unbroken, do not produce distressing and permanent ulcerations.

The anxiety expressed to accelerate the cure of a wound in scrofulous patients, may not seem quite compatible with the advantage sup-

posed to arise from the presence of an external sore in relieving internal complaints. Different practitioners, however, have supported this doctrine, and have exerted their endeavours to promote external suppurations, in hopes of relieving the constitution. Whether this supposed relief be real or imaginary, is a difficult point to determine; for external tumours, without any suspicion of the existence of more deep seated complaints, often bring temporary relief to the constitution upon bursting and discharging matter, merely from the change produced in the state of the local irritation. I do not, however, mean to deny the possibility of a local external discharge proving of advantage, although it is exceedingly difficult to ascertain the precise state of the fact in a disease like scrofula: I am, therefore, not inclined to regard the indication as sufficiently definite to authorise the practice in general; at the same time, it was probably a reliance upon this doctrine which first introduced the practice of inserting issues in children of suspicious parentage, in order to avert the risk of impending mischief. The advantage

of the practice rests upon the exemption from attacks of scrofula, which the early insertion of issues procures to the younger children of a family, after the older brothers and sisters had fallen victims to it in their infancy. I have heard of several instances of families who had the misfortune to lose their two or three first children successively, having inserted issues into those of subsequent births, all of whom survived the dangerous period of life, and grew up to maturity. How far the establishment of the issues contributed to their exemption and relief must for ever remain undetermined; but if there be reason to suppose the operation of the issues to have been beneficial and preservative, they ought undoubtedly to be inserted in like circumstances of apprehension. The practice is at least safe, and it is attended with no great inconvenience.

Supposing the establishment of a drain, in form of an issue, to prove salutary as a prophylactic, possibly the same end may be attained, even to better purpose, by promoting a more copious evacuation of the bowels. I am much disposed to regard the latter mode of accom-

plishing the object to be possessed of many advantages. But while I think the discharge by means of purgatives to be preferable upon principle, I question much how far it is more expedient in practice; for few parents or nurses will bestow the requisite attention to manage the alvine discharge with sufficient correctness to answer the purpose effectually. But the management of an issue is a marked circumstance, which does not admit of neglect for a single day, and which, therefore, without the most inexcusable remissness, cannot go wrong from inattention.

Issues are commonly kept discharging for three or four years before they are completely withdrawn; and, at the time of withdrawing them, the patient is put upon a short course of purgative medicines, to avert any danger that might be incurred by the sudden cessation of a habitual discharge. The precaution of thus interposing a temporary course of laxatives is highly prudent; but, at the same time, is it not almost a tacit acknowledgement, that proper attention to the state of the bowels would prove an excellent substitute for the

discharge by an issue, and might even supersede the establishment of one altogether, provided due care was taken to support a regular and copious evacuation?

Scrofulous complaints in general do not agree well with stimulant applications. In the treatment of scrofulous ulcers, under the ordinary circumstances of the complaint, the simplest and mildest dressings answer best. When the patients are using a course of sea bathing, it is usual to wash the sores with sea water, over and above the momentary application of the sea water during the immersion of the whole body. Cold spring water is likewise a favourite application with many practitioners; and, from much observation, it appears that the operation of cold is well suited to counteract the state of inflammation which accompanies scrofulous sores. Preparations of lead are, upon the whole, very convenient and useful applications, provided the solutions be used in a state of sufficient dilution to prevent irritation. Liquid applications are applied by means of wet linen, which is renewed whenever it dries, so that the surface of the sore

may be kept constantly moist when under this course of management.

Upon the same principle, simple ointment and Gouland's cerate, furnish the best dressing in ordinary cases.

This simplicity of application, however, with the employment of cold, is more properly applicable to the mild and pure forms of scrofulous sores; for when the sores are more malignant, or combined with any other disease, a different mode of dressing becomes necessary. Venereal sores, for instance, breaking out in a person of a scrofulous constitution, partake of the nature of both disorders, and require a correspondent treatment; or, even in a pure scrofulous sore, with more than usual inveteracy, but without any new species of vitiation, a correspondent change of dressing may be requisite. Languid action, which suspends all progress towards amendment, and renders the sore stationary, must be animated by the use of gentle stimulants; or a luxuriant fungous growth, which cannot be repressed by milder applications, may be destroyed by escharotics. All these occasional variations must

be adapted to the circumstances of the case, according to the discretion of the practitioner, who will naturally regulate the mode of dressing agreeably to the general character of the ulcer, modified by the peculiar nature of scrofula.

Those serofulous swellings which contain a fluid, when they are superficial in their situation, and not connected with any parts of importance, are in general better left untouched. They are very slow in their progress, but their natural tendency is to open at last by a superficial ulceration, which forms a small aperture through which the contents are discharged. They rarely discuss either spontaneously, or by the operation of medicines; though this is a termination which sometimes takes place; and it seems to me to be a very desirable termination, as it relieves the patient from the risk of some very troublesome consequential symptoms. At the same time, a certain class of practitioners are apprehensive of the bad consequences which will ensue, from the absorption of the contained matter into the general mass of circulating fluids. The danger of these conse-

quences, however, so far at least as experience informs us on the subject, is not ascertained to exist, and certainly is not so great as to form a serious objection against an attempt to discuss scrofulous tumours of this kind by resolution. But although this may be the desirable line of practice, unluckily there is no certain means of accomplishing the object of our wishes; and whenever such tumours discuss spontaneously, the discussion is more a matter of accident, than a natural termination of the cure, or the effect of art. External applications, so far as my observation goes, possess no sensible effect in producing any change upon them; although, in compliance with established custom, rather than from any expectation of real benefit, it is usual to employ saturnine applications, or solutions of muriate of ammonia, or other remedies of this class. If ever such applications prove useful, it is in the incipient stages of the attack, before the effusion has attained a stationary state; for, after the parts have lost their activity, and have become indolent, medicines seem to possess no power over them.

The longer such tumours remain unopened, they become enveloped in a thicker and firmer cyst, a change of texture which is attended with various inconveniences, and may sometimes suggest the expediency of evacuating the contents of the tumour by an artificial opening; though if the collection be not in contact with any part of consequence, if it be not of a large size, nor increasing in quantity, nor productive of any immediate inconvenience, it may still be unnecessary to do any thing, though this is a point of practice about which there still subsists a considerable diversity of opinion. If the inflammation, though moderate, be sufficient to produce ulceration which penetrates through the whole thickness of the skin, the contents are discharged, the tumour subsides, and the sides collapse. The spontaneous opening is always so small that the contents are discharged gradually, so that no sudden change is produced, and no opportunity afforded for the rapid ingress of air. A spontaneous opening, therefore, so far as it is attended with any sensible effect, procures relief; but this effect

is seldom considerable, unless there has been more tension than usual.

The progress of the cure, after the tumour has discharged its contents, is very various, though, upon the whole it is slow, and the cure often incomplete. The side of the cavity seldom adheres uniformly, or granulates and unites in every part of the surface, so that little partial separate cavities remain, which form sinuses, and continue to discharge matter, and are accompanied with some degree of pain and inflammation; at last, however, often, indeed, after the lapse of a long time, the discharge ceases altogether, and the sore heals up and consolidates. This state of the complaint is of frequent occurrence, and familiarly known: it is one of the most characteristic marks of scrofula, and is very loathsome, though rarely dangerous.

When the interposition of surgery is necessary to accelerate and complete the cure, the object of art is to lay open the sinuses the whole of their length, in order to promote their consolidation from the bottom. But this practice, though it might prove effectual, is often more

severe than what prudence would justify. In mild cases, it is hardly necessary, as the sinuses are disposed to heal up spontaneously, without the aid of artificial assistance; and whenever the tumour has been of such magnitude, and so situated, as to leave sinuses which are extensive and deep seated, the operation is by no means trifling, and may subject the patient to more pain, more symptomatic inflammation, and more contingent danger, than there is prospect of compensating by any probable advantage. It is, therefore, rarely advisable to open such sinuses by incision.

There are several cases, however, which afford an exception to this general rule. When, for instance, the sinuses have continued long in a stationary state, without displaying any tendency to change their condition and heal, the practice of incision, when it can be executed without difficulty or danger, becomes expedient. It may even be a matter of urgent necessity, although the pain and danger be very considerable, if the sinuses, by the depth of their situation, their length, number, and tortuosity, do not give vent to the matter, which,

by confinement, excites and supports a continual fever. Under such circumstances, there is no alternative left in the option of the surgeon, since the confined matter must undoubtedly be evacuated, and a permanent drain formed, to admit of a free discharge in future.

The only other question which remains to be determined, respects the expediency of opening the sinuses their whole length by a longitudinal incision, or of resting contented with free dilatations at the orifice. It is obvious, however, that the determination of this point must depend upon the particular circumstances of the case under consideration, and cannot be subjected to any fixed rule. But to be deliberate and cautious does not imply the adoption of undecisive temporising measures ; and if any good is to be expected from the interference of art, in the management of serofulous sinuses, the incisions must always be made equal to the emergency of the occasion, otherwise the patient will be subjected to irritation and distress, and eventually exposed to danger, for no purpose.

In the treatment of soft scrofulous swellings, although an artificial opening is not in general expedient, yet under certain circumstances it becomes an advisable practice. Deep-seated collections, which increase gradually in size without shewing any tendency to advance towards the surface, are better opened; for when nothing is done to evacuate the matter, it is apt to spread among the muscles, and to come into contact with nerves, blood-vessels, and bones, where it produces various bad consequences. The seasonable interposition of art accelerates the discharge of the matter, and thereby diminishes or prevents the expected inconveniences. In tedious and stationary cases, there is hardly an alternative left in our choice; and when the patient is otherwise in good health, there is a tolerable prospect of accomplishing a complete recovery, by opening the tumour with prudence, and paying assiduous attention to the after treatment of the case.

Supposing the circumstances of the case to render an artificial opening eligible, it then becomes of importance to determine the pro-

per extent to make such an opening, and the best method of performing the operation.

With respect to the first question, I conceive there is no point better established in surgery, than the necessity of making the opening as small as is consistent with the complete evacuation of the matter; because a large opening excites more irritation, exposes more of the cavity, and allows the free admission of air, and is frequently followed by severe inflammatory attacks of an unhealthy kind. The cavity, in consequence of the morbid action which invades its whole internal surface, becomes covered with an offensive putrid slough, which is the cause of an oppressive symptomatic fever, termed, especially by foreign writers, *a foul fever*. In the course of a few days, the matter which is discharged becomes of a brown colour, and more homogeneous in consistence, though, at the same time, more turbid. When the tumour has been of a large size, and, consequently, the internal surface extensive, the quality of the discharge is often long of improving, and the symptomatic fever attains a

great height, and frequently proves mortal in no very long time.

It is, however, only the extreme cases that go rapidly wrong; the ordinary rate of progress is more slow, and then a hectic fever supervenes before the cure terminates unfavourably. Nor is this hectic fever always an uninterrupted prolongation of the feverish attack which immediately succeeds the opening; it frequently occurs when no other kind of fever precedes it; at other times, there is a distinct interval of remission between the cessation of the one species of fever, and the accession of the other. In short, the two feverish attacks are of different kinds, and have no necessary connection with each other; they both indicate a very dangerous state of disease. The primary attack is the more violent, and the more rapid in its progress, but is more various in the degrees of its severity, and admits of more numerous recoveries; the secondary or hectic is more mild in its commencement, more slow in its progress, but more insidious in its nature, and more certainly fatal.

Sulphuric acid, and saline draughts in a state of effervescence, are the medicines which agree best with both forms of attack. Neither of them seem to be much relieved by the use of cinchona, which often proves heavy and indigestible to the stomach, without producing any sensible relief. Upon the whole, mild treatment, with an allowance of simple nourishing food, accommodated to the state of digestion and degree of fever, contributes most to the patient's recovery, which seems to depend more upon the soundness of constitution and the degree of remaining strength, than upon the efficacy of any particular remedy.

It would be unreasonable to ascribe the origin of all consequential attacks to the effects of injudicious treatment; for though improper practice may aggravate the severity of the attacks, it does not create them; but to diminish as much as possible the danger arising from the operation, the tumour ought to be opened by the puncture of a trocar, and, after the contents are completely evacuated, and the canula is withdrawn, the lips of the wound are brought together, and kept in close con-

tact by a bit of adhesive plaster. This cautious mode of proceeding effectually excludes all access of air, and the adhesion of the sides of the cavity may be promoted, and the return of the collection prevented, by means of pressure, provided the situation of the tumour be such as to admit of the application of a bandage; but, notwithstanding every precaution, the collection sometimes returns, when it can be removed, and the patient relieved, only by a repetition of the same practice. There is indeed no alternative; and there is reason to hope that perseverance in the same mode of proceeding will at last effect a cure without any particular inconvenience; at least, this is the safest and more eligible practice in all tumours of a large size.

Some practitioners prefer opening these tumours by the introduction of a seton, with a view of promoting the more speedy adhesion of the surface of the cyst, and thereby procuring a total obliteration of the cavity. The presence of the seton is supposed to support a degree of irritation which contributes to this end; although I question whether the inconveniences

incurred by the irritation be not more than equivalent to the promised advantage; for the adhesions are sometimes but partial, and, at other times, the irritation is so great, as to impose a necessity of immediately withdrawing the seton. I am, therefore, not satisfied with regard to the superiority of this practice upon any general principle; it is, however, applicable to those particular cases in which the matter is lodged in a deep irregular cavity, from which no proper discharge can be established, excepting by the introduction of a seton, which keeps the passage for the matter constantly open, till granulations have time to grow up from the whole internal surface; so that the sinus, or cavity, may be prepared to heal up and consolidate, upon the withdrawing the seton, and applying uniform pressure.

Caustic is not generally employed to open soft scrofulous tumours; though it answers every useful purpose, in cases where a portion of skin requires to be removed. When a tumour has been long pointing to burst, but proceeds with a very slow progress, a considerable extent of skin is rendered too thin to recover and

unite with the subjacent surface in a regular manner. This portion of skin either dies or shrivels up, after the opening takes place, and it is therefore better away ; and the application of caustic may be so managed, as to remove the whole unsound skin, and to evacuate the matter gradually, without producing any sudden change of circumstances.

If the application of caustic excite a general inflammation over the inside of the cyst, previously to the event of opening, I should reckon the practice still more eligible ; since the precession of an inflammatory attack fortifies any surface against impressions, which would otherwise prove injurious, besides disposing it to heal. This consequence, I believe, follows the application of caustic in certain cases ; although my experience does not entitle me to lay down the fact so generally, as to found any practical maxim upon it ; indeed, I hardly possess sufficient data to enable me to communicate any accurate information on the subject, in cases of scrofulous abscesses.

There are a few cases where, in place of making an opening to discharge the matter, the

whole mass of the tumour may, with signal advantage, be extirpated by excision, with the cyst unopened. A thick firm cyst does not readily assume any healthy action, which tends to produce a radical cure : it neither adheres from inflammation, nor granulates nor separates by sloughing ; but, instead of undergoing any of these salutary changes, it continues in an indolent state, and is at last converted into a permanent running sore, which has no disposition to heal, and which perpetually annoys the patient by its irritation and offensive discharge. Under these circumstances, if the tumour be of moderate size, and in an accessible situation, and if it be covered with a sufficient thickness of substance to promise a speedy union with the subjacent parts, I consider excision to be an advisable practice. The operation is easily performed ; and the cicatrix of a simple longitudinal wound presents much less deformity than the vestige of an uneven inflamed irregular sore. I have known this practice carried into execution, with a happy effect, in tumours of this kind situated in the trunk of the body, particularly in the region of the thorax.

The topical treatment of swelled glands, and of other tumefactions of a solid nature, must bear a certain relation to the circumstances of the case. The treatment of swelled glands, in particular, will vary according to the state of the gland, and the depth of its situation. At all times, indeed, it is desirable to prevent suppuration; and when the glands are superficial, and adhere to the skin, we may hope to influence their progress, by the use of topical applications. But if the glands lie deep, and are moveable, we cannot promise upon the penetration of any remedy with much confidence. In the more ordinary cases of enlargement, unaccompanied with any appearance of adhesion, or of active inflammation, I am inclined to entertain a favourable opinion of the use of warm fomentations, employed twice or thrice a-day. These fomentations, in general, consist of sea water, or vinegar and water, or dilute solutions of the acetite or muriate of ammonia, or decoction of chamomile; the addition of these different medicinal ingredients to pure water increases the efficacy of the fomentation. After the removal of the fomentations, and, indeed, more

commonly when no fomentation has been previously employed, friction, with camphorated and ammoniated oils, is a very popular and favourite remedy : it is a very convenient application, and, I believe, is well adapted to this state of infarction of the glands. Friction, with the marine plants, has likewise been much celebrated as a remedy in the cure of swelled scrofulous glands ; but as it has been constantly conjoined with the practice of sea bathing, it is difficult to appreciate its separate merit. There is no reason to believe that the marine plants possess any peculiar virtue, or differ in their effects from the use of pure sea water.

My experience in cases of this kind, however, does not lead me to repose much confidence in the efficacy of external applications towards promoting the cure, which seems chiefly to depend upon the state of the constitution, upon regimen, and upon the effect of internal remedies.

When enlarged glands, which lie superficially, or adhere to the surface, are attacked with inflammation, and threaten to suppurate, they are then more within the reach of external ap-

plications. In such cases, the topical detraction of blood is the most powerful remedy, and ought to be repeated frequently during the incipient stages of the attack, subject, however, to the modifications which have already been noticed in explaining the combination of scrofula with attacks of simple inflammation. The application of blisters is likewise adapted to two stages of the attack, in cases of inflamed scrofulous glands. In the incipient stage, when the inflammation is in the highest state of activity, the excitement of superficial irritation, accompanied with a purulent discharge, moderates the inflammation of the gland, and promotes the resolution of the attack. In a farther state of advancement, when the activity of the inflammation is on the decline, and the swelling of the gland has become indolent and stationary, the stimulus of a blister imparts fresh vigour of action, which may dispose the swelling to disperse. It is a safe practice in all such cases, and, therefore, ought to be tried and repeated as often as the symptoms may require.

If the swelled gland proceeds to suppurate, notwithstanding every endeavour to obtain a cure by resolution, it is still necessary to regulate the treatment of the cure, accordingly as the inflammation participates more of a scrofulous or of a healthy nature. Those cases in which healthy inflammation predominates, are to be treated nearly on the principles of a common abscess. There is rarely occasion to open them artificially, as their progress is in general unusually rapid, so that they burst spontaneously in a short time. This rapidity of progress may indeed seem contrary to the established character of scrofula; yet the fact appears to be, that when a severe attack of active inflammation invades any part deeply tainted with scrofula, the progress is more rapid than if the attack had been made on a part in the vigour of health, as a healthy part would have been more able to resist the impression of disease. The scrofulous contamination, however, so far as it operates, produces changes of much importance in practice: it has a greater tendency to promote effusion, accompanied with less disposition to produce those

useful adhesions, which serve to circumscribe the extent of the abscess. The suppuration is therefore liable to spread rapidly over a large space, and thereby to include a great mass of parts within the sphere of diseased action. An early opening furnishes the only effectual means to anticipate the arrival of these distressful consequences, by procuring a more speedy evacuation of the contained matter; for the confinement of the matter encourages the extension of the suppuration into the adjacent adipose membrane; nor does the original commencement of the attack in the body of a gland always prevent the inflammation from extending among the neighbouring parts. This, however, is the only case in which the admixture of a scrofulous taint leads to the early opening of a suppurating gland; for when the suppuration is more purely scrofulous, the character and progress of the attack is widely different, and requires quite other treatment: there is no hard basis, little pain, and no disposition to spread, and the progress is naturally slow. The swelling often consists of a considerable cluster of glands, though only

one or two of them proceed the length of suppuration. The suppurating gland enlarges, and becomes gradually soft, while the whole suppuration is confined within the original coverings. Thus there is a bag of matter formed, without exciting much irritation; and, if the attack be permitted to follow its natural course, the abscess bursts spontaneously, and discharges the whole contents through a small opening, without creating any sensible disturbance to the constitution. Even the substance of the enveloping tunic is said to separate, and come away in the form of white shreds, so that, by this natural process, every part of the gland at last gradually disappears. But this separation of the cyst is certainly not a constant step in the healing process; and I cannot recollect a single instance in which I have seen it distinctly take place. In most cases granulations rise from the whole internal surface of the cavity, which gradually unite and form a solid basis for a cicatrix.

The aperture, though always small at first, sometimes extends in dimension, from the great thinness which the skin attains before

the erosion is completed at any one part. An aperture in this state is often stationary in its size, showing little disposition to contract, and acquiring a glassy appearance, and thickness on the edges, approaching to incipient callosity. The induration, however, is seldom so great as to prevent the margin from contracting gradually towards the centre, till the whole surface is at last covered with a cicatrix. This, however, is undoubtedly a case in which the cure may be safely trusted to the spontaneous efforts of nature. Officious interference could do no service; it would excite pain, and is more likely to form an extensive sore, and to leave an ugly cicatrix, which would not otherwise produce an equal degree of deformity. I have known this form of scrofulous suppuration occur in persons very far advanced in life.

In those cases of scrofulous affection which terminate in the formation of indurated, indolent, stationary, glandular swellings, which, from their inactive state, afford no hope of a cure by resolution, a proposal has been made to remove or destroy the diseased glands by

excision, or by the application of caustic. The practice offers a severe remedy for the complaint, and has been chiefly confined to the treatment of swelled glands about the region of neck. It will, therefore, be sufficient to discuss the merit of the proposal in this particular instance, more especially, as of all superficial glands, those about the neck are the most frequently affected with incurable swellings.

A pathological question occurs here, which has been the subject of much diversity of opinion among practitioners; namely, whether this swelling in the glands of the neck is, or is not, an indication of a more serious affection of the internal deep-seated glands? No very general nor conclusive inference can be deduced from the result of anatomical dissections; since, in those cases which are not inveterate, which have not subsisted long, and have not proceeded far in their progress, the affection is confined solely to the superficial glands of the neck; while, in cases of longer standing, and of a more obstinate and malignant nature, the whole chain of glands which

enter the trunk of the body, are found swelled and indurated. This unsteadiness in the appearance of disease, is at least a proof that the scrofulous affections in these two sets of glands, are not connected together by any immutable law; and that the presence of swelling in the superficial cervical glands, does not alone entitle one to form any positive conclusion with regard to the state of those situated within the trunk of the body.

There is no doubt, that as the glands of the neck are, from their superficial situation, much exposed to the agency of external causes, they will be greatly affected by exposure to cold, to the vicissitudes of the weather, or to many other circumstances which will readily make a temporary impression upon them. The frequency with which they swell, and the facility and celerity with which they sometimes subside, confirms this account of their susceptibility of assuming slight morbid action; but surely no prudent practitioner would ever dream of performing so serious an operation, for the cure of these occasional transient attacks. In the other case, when the affection has subsisted

so long, and is attended with such symptoms as to afford strong presumption, that the chain of internal glands with which those situated in the external part of the neck are connected, have likewise become affected with disease, the removal of the enlarged superficial cervical glands would prove a very partial and useless operation, which never could effectuate a radical cure ; so that there is no very probable condition of circumstances which can make the practice of excision advisable.

If, then, no evidently useful purpose is to be answered, by extirpating those cervical glands which are permanently and incurably infarcted, one surely would not subject a patient to so severe an operation, merely in hopes of removing a deformity. It does not even appear that this end would certainly be attained ; for if the enlargement of the glands was inconsiderable, then the deformity would not be nearly so great as what would be occasioned by the cicatrix, which would necessarily remain, after an operation to destroy or to extirpate them. The external incision must, in all cases, bear a relation to the preternatural enlargement of the

glands, and, consequently, form a cicatrix proportionably extensive. Besides, if the glands had attained a large size, and had formed adhesions, the operation would necessarily be excessively severe, the practicability doubtful, and the attempt exceedingly hazardous. There are even instances on record of patients having fallen victims to this injudicious practice.

The destruction of enlarged cervical glands, by the application of caustic, is liable to similar, or even more powerful objections. The size of the escar would necessarily produce a more extensive and more unsightly cicatrix; and if any large mass of substance, lying in a deep situation, was to be destroyed by caustic, there would be no setting bounds to the extent of its action, since, after it was dissolved by the moisture of the body, it would spread among the complicated parts of the neck, excite extensive and violent inflammation, and thus do irreparable mischief.

The celebrated Serjeant Wiseman, and some distinguished modern surgeons, approve of extirpating enlarged and indurated scrofulous glands; which is the only consideration that

induces me to entertain the slightest doubt with regard to the universal applicability of the passive practice in all such cases.

However disagreeable chronic enlargements of the cervical glands may be, yet the patient may derive consolation from reflecting, that these swellings are often very numerous and very large, without sensibly impairing the health or constitution, or even impeding the functions of respiration or deglutition.

From having delivered doctrines so repugnant to the practice of extirpating scrofulous glands, it will not be thought surprising that I should rarely have witnessed the operation. I have indeed seen some diseased scrofulous glands of the axilla removed by extirpation ; but, in this case, the practice was advised, from a misconception with regard to the nature of the disease, the disease having been supposed to be cancerous, while in reality it proved to be only scrofulous. But the success of the operation did not furnish a precedent which would invite to a repetition of it ; for other glands in the same cluster soon swelled, and became painful, displaying the inefficacy of

the partial extirpation of a scrofulous affection. The patient still continues to be distressed with glandular swellings in the axilla; but though this obstinate complaint has now subsisted for years, it has neither spread, nor degenerated, nor contaminated the system; and the operation has been attended with no other effect, than that of subjecting the patient to a great deal of unnecessary pain and distress, and eventual danger.

The circumstance of the operation having been performed under a mistake, could make no alteration in the consequential symptoms; or, supposing the surgeon to have been undeceived, and to have known from the first the disease to have been scrofula, yet surely a case which from its severity could have been mistaken for cancer, would have been regarded as a fit subject for operation, by the patrons of active practice in scrofulous cases.

Scrofulous congestion, of a solid nature, in the more external parts of the body, are little adapted to the practice of local bleeding, unless they be attended with symptoms of inflammation; but as some degree of inflammation is,

in general, present during the incipient stage, it may be prudent to employ local bleeding in moderation at the commencement of the attack, although there may be no indication to persist in the practice, after the complaint has advanced farther in its progress. If, however, these congestions are more of an indolent nature, unaccompanied with heat or pain, there is no benefit to be expected from the local detraction of blood; warm fomentations, together with the use of stimulants, and a repetition of blisters, are the most serviceable class of remedies: Such cases, too, are the best adapted to the use of friction as a discutient. Friction, indeed, has long been employed for this purpose; but, of late years, it has been introduced to an extent, and with an effect, far beyond the experience of all former practice. As yet, it has been circumscribed to the practice of a very few individuals, with whom it is said to have performed very great cures; and if, upon the test of more extensive experience, it is found to answer its present high character, I shall consider the use of repeated frictions to be one of the most valuable improve-

ments which has been introduced into practice in modern times. The safety and simplicity of the practice recommend it very strongly to favour, though I am afraid they are the very circumstances which retard its adoption by the public in general. I only regret that I do not feel myself entitled to give a decided opinion upon the subject from my own experience, though I have known some instances of successful cures ; but the reports of success are so numerous and so well supported, that I am inclined to think very favourably of the practice.

There is no substance interposed between the surface of the swelling and the hand of the person who administers the friction, excepting a little flour, to prevent the abrasion of the skin. The friction is applied regularly two or three hours every day, with great celerity, the hand being made to move to and fro one hundred and twenty times in a minute, and the course may require to be continued, without interruption, for some months.

When these solid scrofulous congestions, in place of discussing, proceed to suppurate, the suppuration is commonly partial, and in the

form of different distinct collections of matter, which are inconsiderable in size, when compared with the general bulk of the swelling. The unsoundness of the whole mass makes these little abscesses indisposed to heal ; so that it is often necessary to make longitudinal incisions the whole of their length, or, at least, very extensive dilatations, to promote the cure. Scrofulous complaints of this kind are very troublesome to manage, and the recovery from them, even under the most judicious treatment, is tedious and uncertain.

In the early stages of very extensive effusions in the extremities, unaccompanied with inflammation, and which, if allowed to remain unremoved, would in time produce chronic indurated enlargements, much advantage may be derived from the use of permanent compression, by means of tight bandages applied over the whole limb. The case must be recent, and the compression steadily employed, to afford any probable prospect of success.

It now only remains to consider the expediency of removing the diseased parts by an operation. When the scrofulous affection is

circumscribed and incurable, and accompanied with so much pain and irritation, as to prove a perpetual source of distress, which excites general disturbance in the constitution, and threatens life with danger, an operation is then the only remedy which affords the smallest prospect of relief. There is nothing in the general nature of scrofula to impose a prohibition against the removal of the diseased parts. The symptomatic enlargement of the lymphatic glands, which lie nearer to the heart than the site of the disease, presents no solid ground of objection ; for this enlargement proceeds from irritation more than from the absorption of morbid matter ; and the glands often subside, whenever the original cause of their enlargement is removed : At worst, they only remain stationary, without increasing in size, or proceeding to suppurate, and form bad sores.

The apprehensions which have been entertained, with regard to the tendency which the removal of a local scrofulous affection has to invite a similar attack upon another part of the body, are neither supported by any considerations which the general nature of scrofula sug-

gest, nor by the result of experience and accurate observation. Practitioners are in the daily habit of removing local scrofulous affections, with the immediate improvement of the patient's health, and the greatest permanent benefit to his constitution : But surely these consequences would not follow, if the only effect of an operation was to transfer the complaint from one part of the body to another, and thus to perpetuate a series of local affections.

The removal of a local affection cannot, indeed, exempt the sound parts of the body from the risk of an attack at a remote period of time, though, in the first instance, it undoubtedly contributes to the extinction of scrofulous irritation ; and if ever fresh scrofulous symptoms break out, immediately after an operation, the renewed appearance of the disease is referable to some other circumstance in the state of the patient's health. There is no set of cases in which patients derive greater or more sudden relief from the removal of the morbid parts ; and, though theory might lead us to apprehend some risk of inducing an attack of scrofula, from the temporary fever

and exhaustion subsequent to an operation, yet experience does not confirm the reality of these apprehensions.

Whether or not there exists any thing like a general scrofulous fever, independently of local irritation, is a point which I cannot take it upon me to determine ; though the existence of such a fever is not inconsistent with some phenomena of the disease. There is even a possibility that the local affection may arise from the immediate active state of the scrofulous disease, in cases where the attack is unusually rapid in its progress, and accompanied with an extraordinary degree of fever. In such cases, the patient may be exposed to another scrofulous attack, of a like critical nature, on a different part of the body, so long as the disease retains the same state of activity. Certain appearances, in a few singular cases, countenance these suggestions ; though I suggest the hint with much diffidence, from my consciousness of the imperfect state of knowledge in this branch of the subject.

The case to which I allude was that of a young lad about thirteen years of age, who had

the misfortune to be attacked with an incurable scrofulous caries in the elbow-joint of the left arm. The urgency of the case left no doubt with regard to the necessity of recurring to immediate amputation. The arm was removed, and the stump exhibited a favourable appearance; but, in the course of eight days from the date of the amputation, the lad began to complain of pain in the elbow-joint of the right arm, which, upon inspection, appeared to be swelled and inflamed. The attack proceeded with singular rapidity, so that, in the course of forty-eight hours, a very large purulent abscess was formed, which burst and discharged a prodigious quantity of scrofulous matter. When a probe was introduced at the orifice, to examine the extent of the cavity, it went directly down to the bones of the joint, which were discovered to be rough, and incurably diseased. The lad got rapidly worse, and soon sunk under the severity of the attack.

The history of this very singular and distressing case cannot alone lead to any positive conclusion with regard to the existence of a

proper scrofulous fever. It is, however, sufficient to excite curiosity and alarm; and if, according to the vulgar ideas of the humoral pathology, there is any truth in the notion of the scrofulous matter being afloat in the constitution, a practitioner would be careful to allow this morbid agitation to subside before he ventures to recommend an operation. There is frequently a general disturbance in the constitution previously to a regular fit of gout. Of what nature it is, or what analogy it bears to the above described state of scrofula, I cannot pretend to determine. I shall, therefore, content myself at present, with recommending the prosecution of this interesting inquiry to the attention of those who have opportunity and leisure to follow out the investigation.

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Just and accurate views, with regard to the nature of any disease, contribute much to facilitate the investigation and management of particular cases; I have, therefore, ventured to state the conclusions which have occurred to me in considering the subject of scrofula. They are the result of experience, and have been suggested

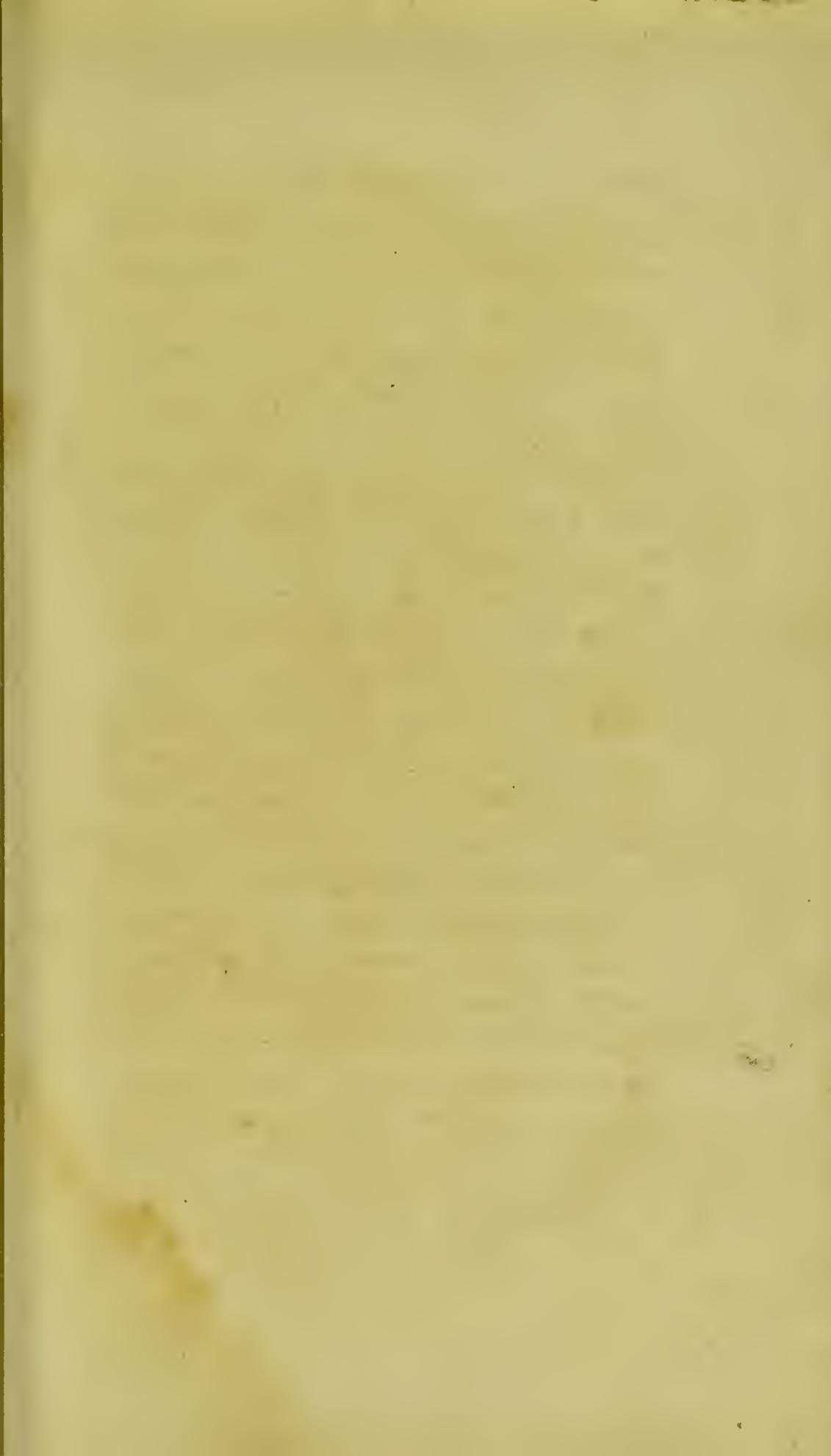
by the contemplation of those facts which have presented themselves to my observation in the course of long and extensive practice. If the doctrines which I have delivered are found to be just, and to contain any thing new, I shall think myself fortunate in having published them. I am not conscious of being actuated by any unreasonable prepossession in favour of my own views of the subject ; and if future and more enlightened experience shall discover any blemishes in my opinions, and shall either point out errors to be corrected, or deficiencies to be supplied, I shall most cheerfully adopt every improvement which is founded on observation and truth.

I hope I may now be permitted to say a few words with regard to the plan and execution of this Treatise, and, in particular, with regard to what may by some be supposed to be an omission. It may possibly have been expected, that I should consider the scrofulous affections of the different organs of the body ; affections, for instance, of the testicles, of the mamma, of the bones, of the region of the parotid gland, &c. which form a very numerous and important

class of diseases, and which certainly merit a very full investigation. Of all this I was fully aware, but I found that the discussion of so many subjects of so great magnitude, would open a field of very extensive, indeed, I might almost say, of boundless inquiry; for, as scrofula attacks all parts of the body indiscriminately, the diseases of every organ would have been included within this range. In many cases, too, the peculiarities of the organic affection predominate over the characteristic effects of scrofula, so that a previous knowledge of the common diseases of an organ is requisite to understand the discriminating circumstances of the scrofulous affection; and it is obvious, that this knowledge can be acquired to much greater advantage, by consulting separate dissertations on the diseases of these several organs, than from any short account which I could with propriety premise in a general Treatise on Scrofula. From these considerations, I have relinquished all idea of comprehending an account of the scrofulous affections of the different organs within the plan of this work; contenting myself at present with

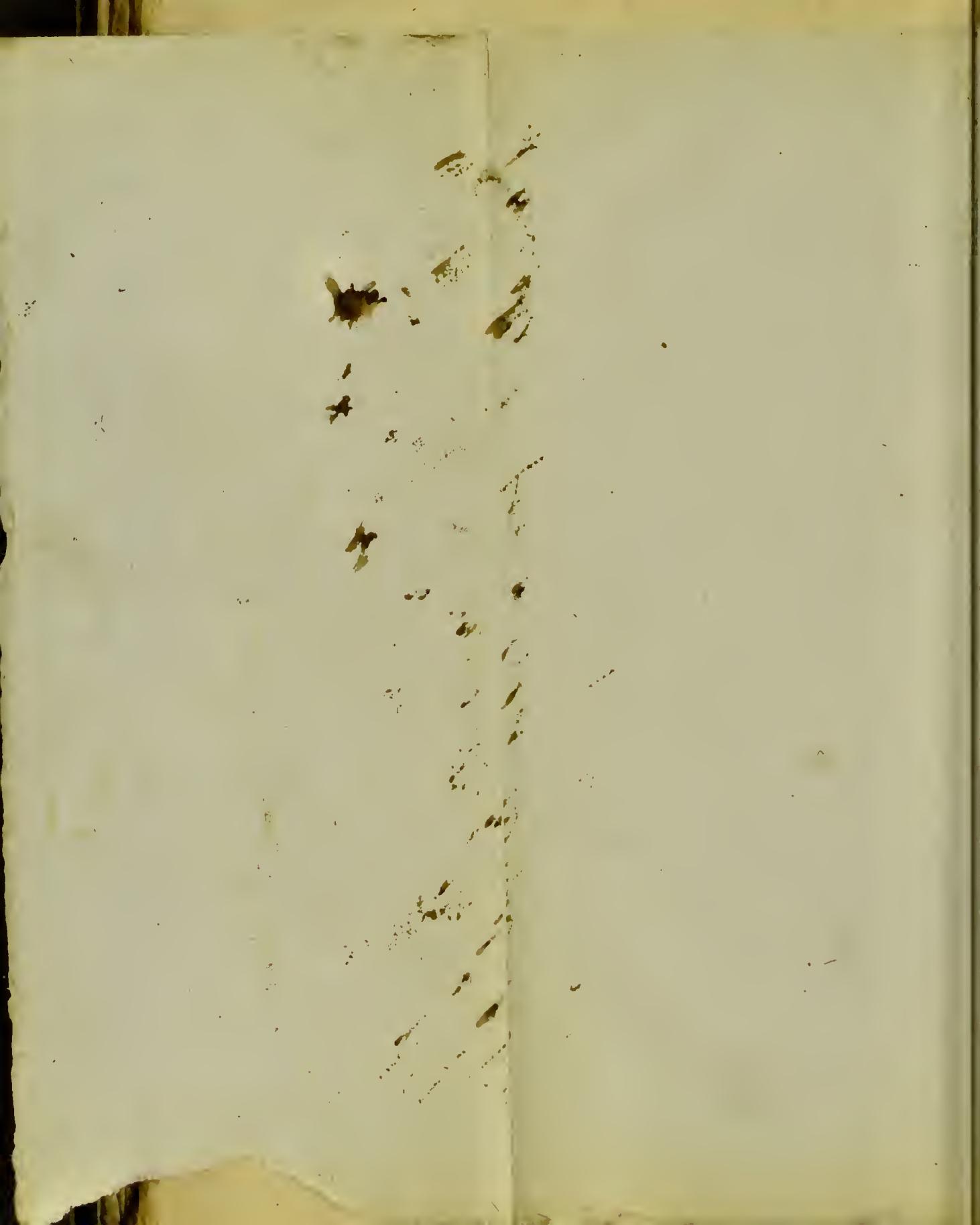
giving a view of the nature and treatment of scrofula in its more general form, and reserving for the subject of future and more particular discussion, any observations which I may hereafter have to offer on the more interesting scrophulous affections of particular organs.

In the whole conduct of the work, I have been careful not to indulge in any speculation which required a long train of reasoning, nor, indeed, to deduce any inference which was not the obvious and immediate consequence of facts of acknowledged notoriety. One great object of the publication was to encourage every lover of his profession to investigate the appearances of nature carefully and impartially, and then to judge for himself; for this mode of studying diseases is the only sure one to form judicious and intelligent practitioners, and to lay a rational foundation for solid professional improvement; and nothing will afford me more real satisfaction, than to think that my labours have at all contributed to promote this desirable end.









Cold bathing, especially cold sea bathing, is a remedy universally employed in scrofula, & I believe with great advantage in many cases for it - not only appears to improve the patient's general health & strength, but likewise to promote the development of our skin & glands. The induction of sudden cooling welling in the joints, however, may have occasioned a considerable ease, & had expected for a great length of time

Russell on Scrofula

